MAIN—Mid-America Information Network

MAY 15, 1967

MAY 18

RAILWAY AGE

THE TRANSPORTATION WEEKLY

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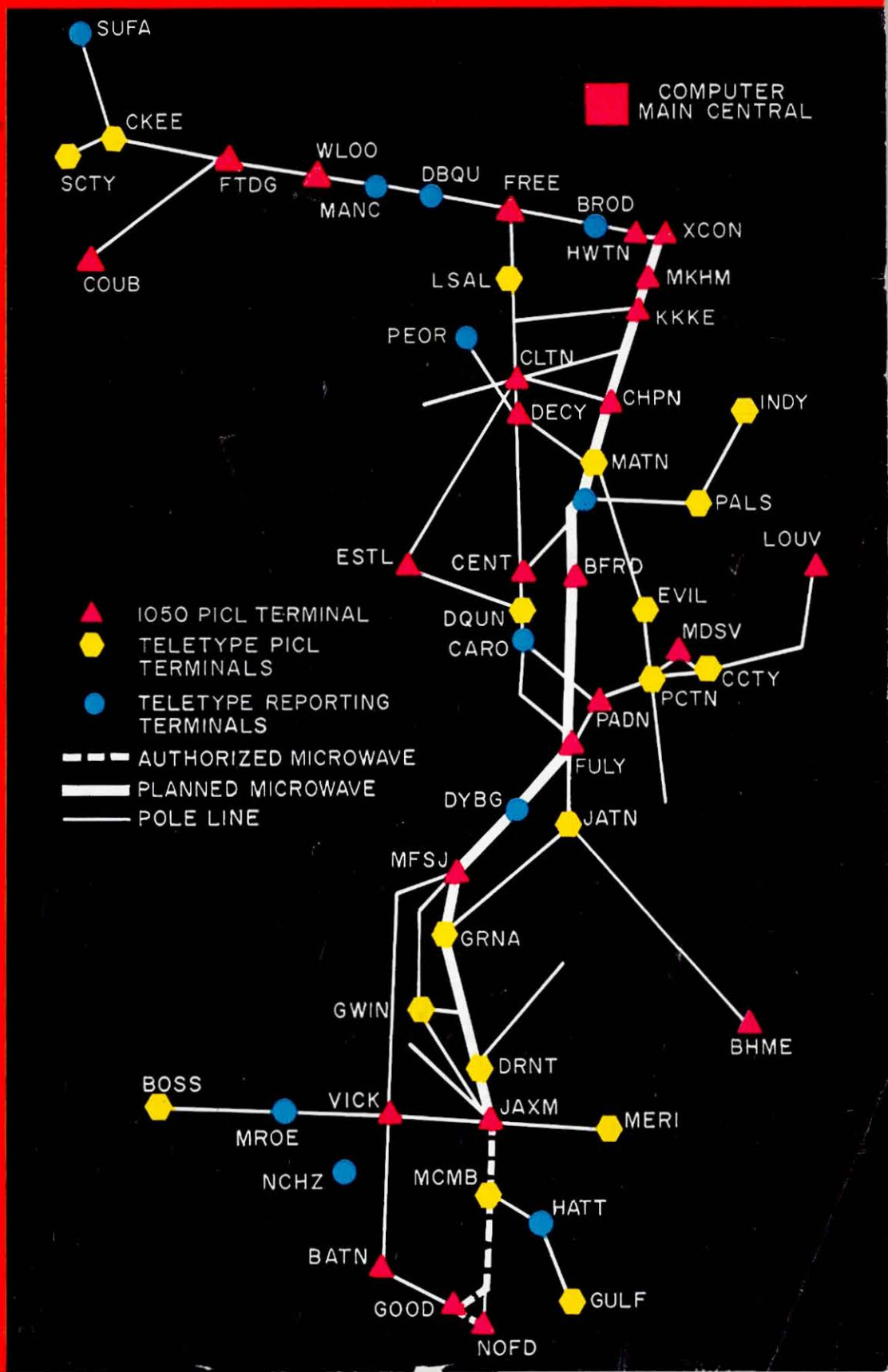
IC's MICROWAVE: PLANNED FOR PROFIT

p. 16



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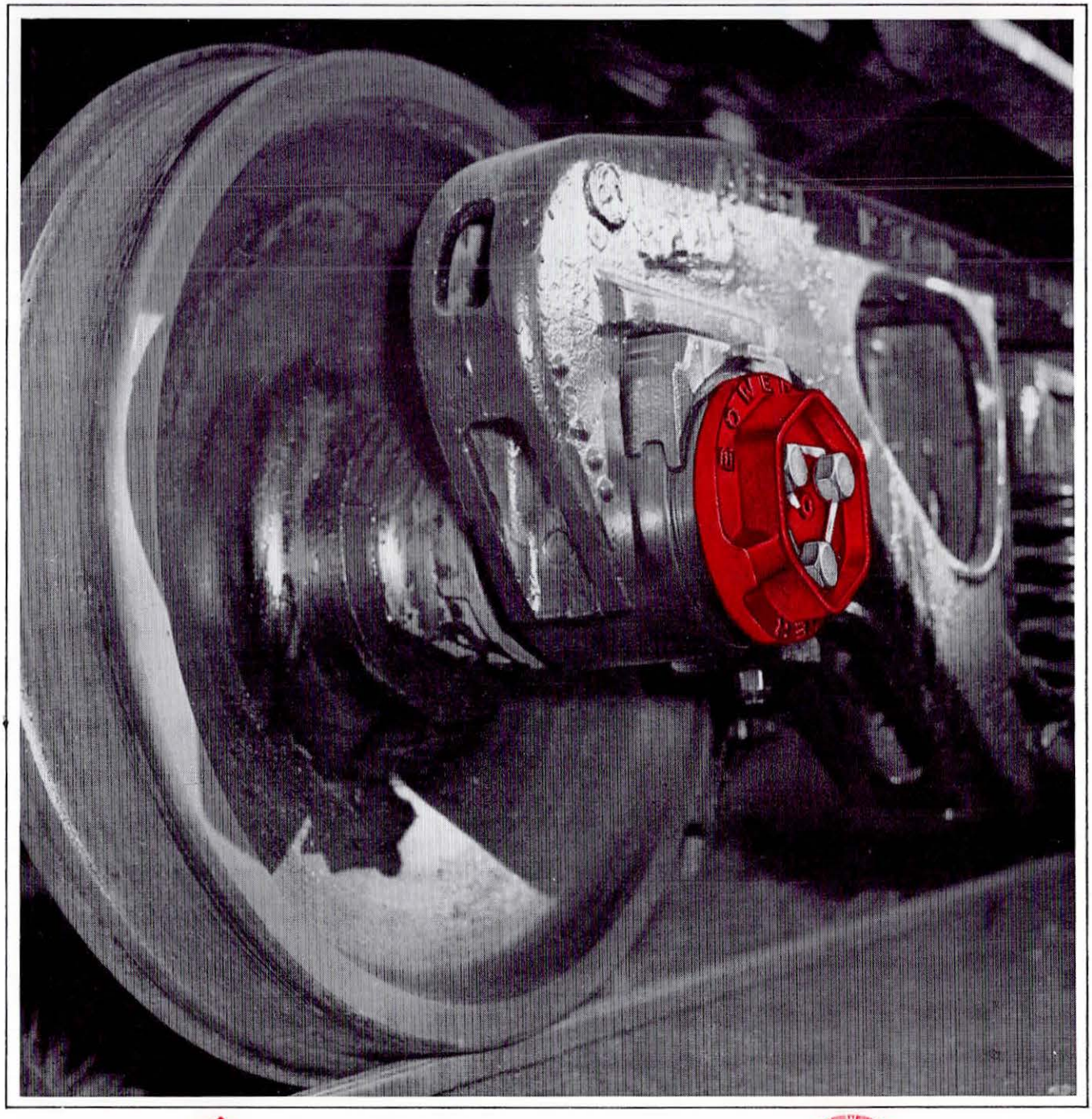

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1921 1922 to 1935 1936 to 1966

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New color, too. We call it Big Sky Blue because it so vividly typifies the magnificent Big Sky country of plains, mountains and water where our busy tracks run. We've just begun the enormous task of applying our new color and trademark to Great Northern's locomotives, passenger and freight equipment. While this big, time-eating job is underway we'll keep our passenger and freight services in full-scale operation. Try us and see!

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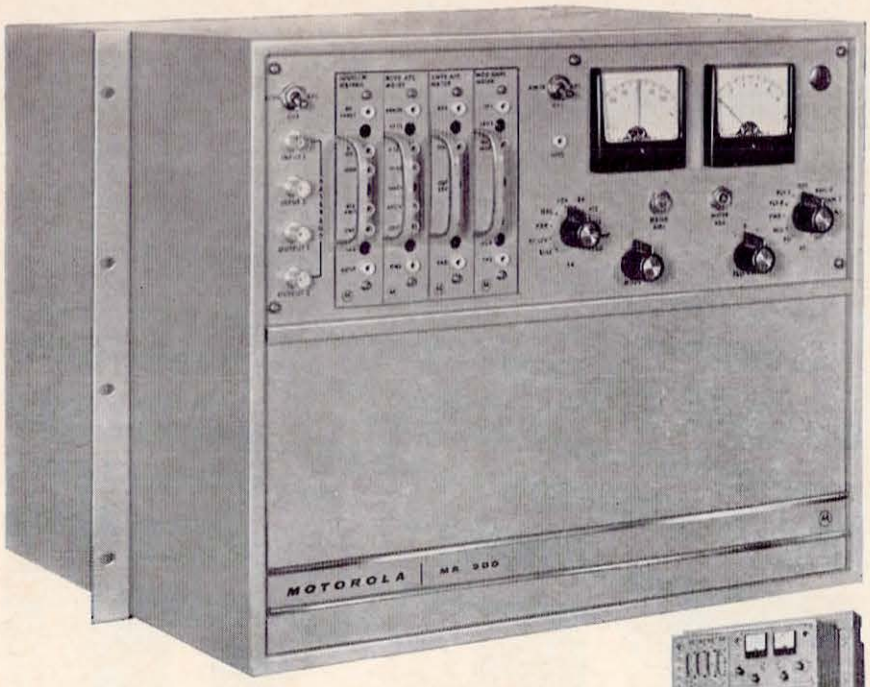

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Microwave Equipment

The latest member of the Motorola microwave family, featuring:

High-density, 600-channel SSB-SC or equivalent capacity,

A full one watt delivered to the antenna system, and

A low-noise receiver (TDA) option for improved fade margins and system flexibility—

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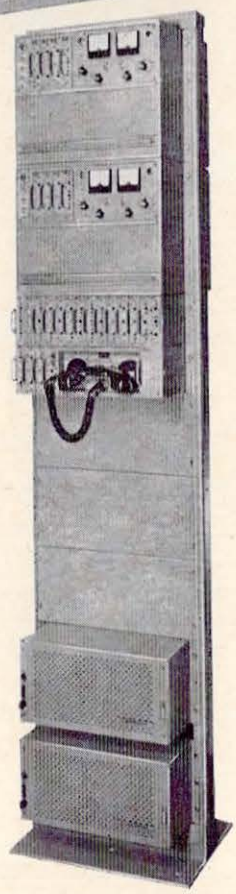
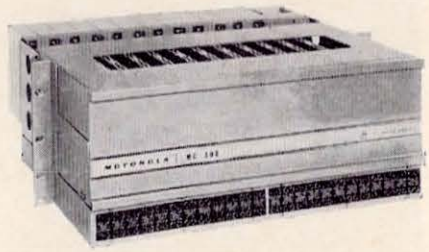
Standard options include Hot Standby, Space Diversity, and Frequency Diversity. Solid-state transmitter switch and linear receiver combiner accommodate your present and future data requirements.





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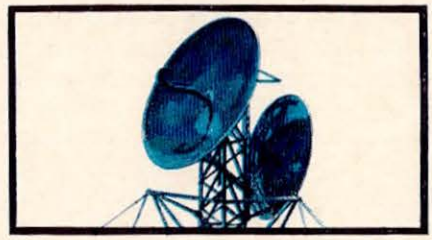
This 600-channel SSB-SC multiplex system offers the latest advances in performance and in compact packaging techniques. Identical plug-in, four-wire modem cards for greater maintainability and reduced spares. All passive networks, channel filters, and hybrids are mounted outboard of the plug-in cards. Basic signaling/termination card is equipped for solid-state E&M; appliques are available for conversion to other types of signaling. Each plug-in modem and signaling card is equipped with individual DC power regulator.

For full details on these microwave products designed with your railroad in mind, call your Motorola Man, or write to: Motorola Communications and Electronics Inc., 1450 N. Cicero Ave., Chicago, Illinois 60651. A Subsidiary of Motorola Inc.



MOTOROLA Ⓜ **MICROWAVE**

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May 15, 1967 • Vol. 162, No. 19

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IC's MICROWAVE:

16 The system is planned for profit

The road's $15.5-million Mid-America Information Network (MAIN) will provide annual savings of over $5 million by 1970.

19 Costs get cut all along the line

Total savings in MAIN's communications area alone are tabbed at over $1 million through 1969, at least $500,000 a year after that.

21 Better car utilization will be assured

When fully operational, the MAIN network will contain 44 Perpetual-Inventory-for-Car-Location yards.

42 Viewpoint: Yes, Senator—it's important

Senator Long questioned the importance of restoring the investment tax credit—but no railroader will.

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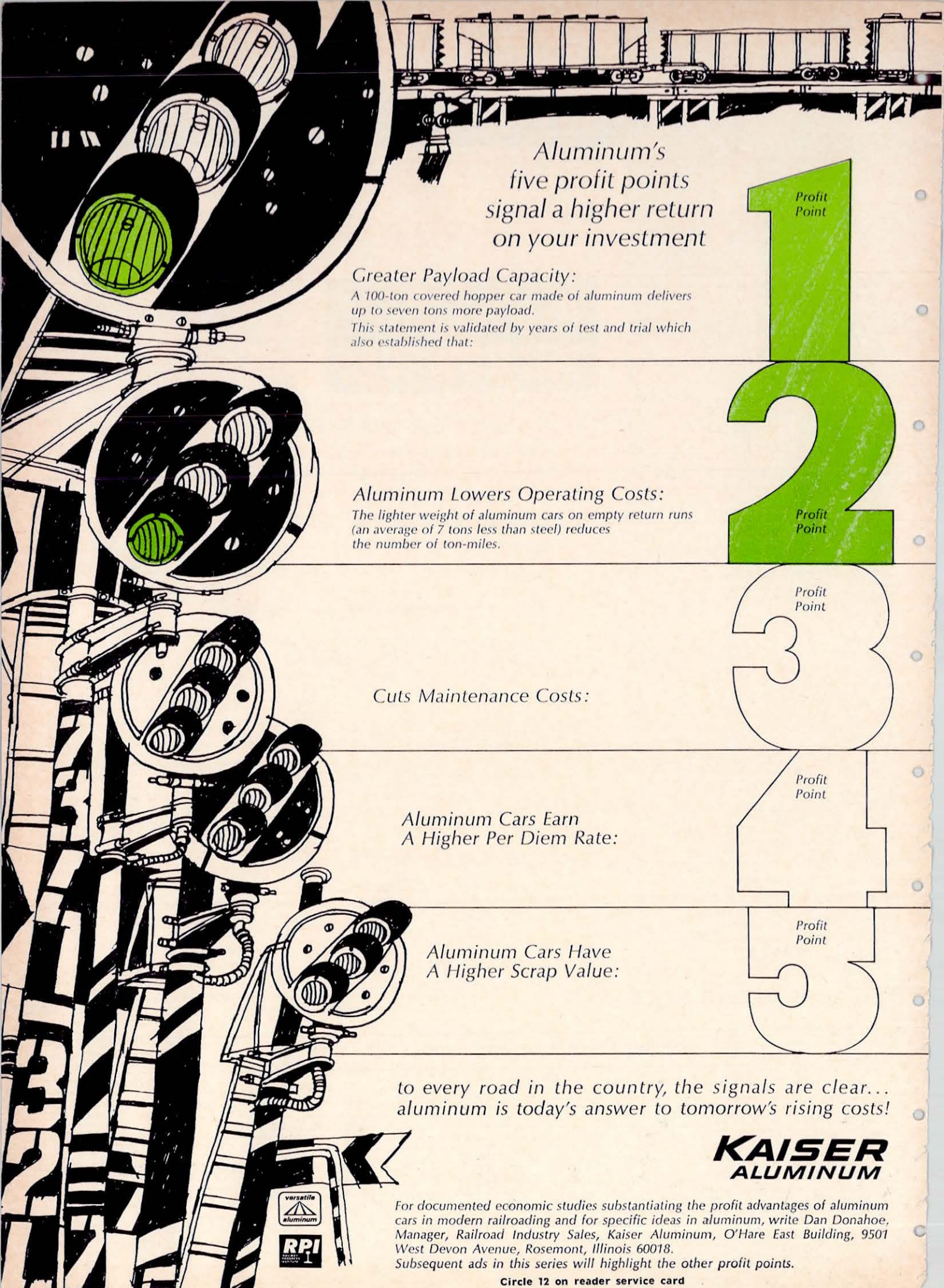

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3 Profit Point

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Aluminum Cars Have A Higher Scrap Value:

5 Profit Point

to every road in the country, the signals are clear... aluminum is today's answer to tomorrow's rising costs!

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For documented economic studies substantiating the profit advantages of aluminum cars in modern railroading and for specific ideas in aluminum, write Dan Donahoe, Manager, Railroad Industry Sales, Kaiser Aluminum, O'Hare East Building, 9501 West Devon Avenue, Rosemont, Illinois 60018.

Subsequent ads in this series will highlight the other profit points.

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SHORT AND SIGNIFICANT

Magnuson would make IC Act a more tidy package

The Senate's Commerce Committee has embarked on a project of "consolidating and re-enacting" provisions of the Interstate Commerce Act. This has been announced by the committee's chairman, Sen. Warren G. Magnuson (D-Wash.). Magnuson says the Act is in need of this treatment because it has been rendered confusing by the many amendments which have been made since the original act was passed in 1887.

●

Senator Scott blasts Erie-Ohio canal

U.S. Senator Hugh Scott (R.-Pa.) last week described the Lake Erie-Ohio River Canal project as "ill-conceived" and "uneconomical." He asked an "immediate review" by the Department of Transportation. Senator Scott told D.O.T. Secretary Alan S. Boyd: "The canal would not integrate with existing transport patterns in the immediate and adjacent areas, and would offer no benefits from the point of view of an over-all transportation system. To the contrary, it would disrupt the functioning of the highly refined transportation network now in existence." He added: "I am determined to do everything within my power to see that no further expenditure of tax funds is made on this dubious project until an objective analysis based on the latest available information can be completed."

●

Milwaukee will fight N&W-C&O merger

Milwaukee Road, a major participant in the battle over Union Pacific's acquiring a route into Chicago, says it intends to fight a similar combine that threatens to invade its territory from the east, the proposed Norfolk & Western link with the Chesapeake & Ohio/Baltimore & Ohio. Milwaukee Chairman Leo T. Crowley told stockholders at the road's annual meeting in Chicago last week that Milwaukee expects to cooperate with other eastern and midwestern railroads to bring attention to damage inherent in the proposed merger. Crowley said the merger "could drain away much of our traffic between the Missouri River and our Chicago and Indiana gateways." He pointed out that the merged road would extend west to such points as Des Moines, Kansas City and Omaha over the lines of the former Wabash system. At the same time, Milwaukee reported it is making important progress in its proposed consolidation with the Chicago & North Western, and that it is receiving excellent cooperation from shippers and communities. Milwaukee's application for consolidation with C&NW was filed with the ICC last June.

●

Supreme Court rules against NH bondholder

The U.S. Supreme Court has ruled that interests pressing for inclusion of the New Haven in a merged Pennsylvania-New York Central simultaneously with that merger's consummation must await further ICC proceedings. The court thus decided an appeal from an NH bondholder, Oscar Gruss & Son, from the ruling of a lower court which refused to enjoin the merger. The high court's determination was in light of its recent order sending Penn-Central back to the ICC for further proceedings designed to insure that Erie Lackawanna, Delaware & Hudson and Boston & Maine will be included in a major eastern system (RA, April 3, p. 67). Meanwhile, the high court made it clear that Gruss can go to court again if it is not satisfied with what the Commission does in these further proceedings.

MONDAY MORNING REPORT

Lots of talk— what does it prove?

The second annual BRT Conference on Public Transportation broke up along about mid-afternoon on a sunny Sunday in Chicago—with a lot of people wondering just what it was they'd been absorbing for the previous two and a half days. The volume of the intellectual intake was staggering. In advance of the conference, participants were sent copies of 13 separate papers. When they registered at the University of Chicago's Center for Continuing Education, three more papers were added to the stack. Then the 70-plus participants were split into four workshop groups, and each group worked through three sessions. And when the final, general session was convened, what happened? Predictably, the one thing that was missing was consensus.

Sound and fury, dialog and debate

One observer described the work of the conference as "one man-year of discussion." Given the roster of people assembled, it was lively discussion —among railroad management representatives, labor people, educators, consultants, sociologists, government officials at several levels, supply-company representatives. To some, there might have been a temptation to echo Macbeth and describe the seminar as "full of sound and fury, signifying nothing." But the BRT people, sponsors of the meeting, seemed serene, calm, satisfied. And the participants? Most had that thoughful air which goes with reflection on several days of strenuous intellectual exercise, dialog and debate.

Too much talk— or too little?

For its part, the BRT has been content to remain in the background— encouraging publicity, but steering it in the direction of the participants. And the success of the two conferences may be due in part to this, as well as to the fact that the union has found an intriguing paradox on which to hang its programs: Transportation gets more "media and conversational verbiage than anything except sex and the war in Vietnam, but it still suffers from limited exposure."

Apart— or together?

BRT President Charles Luna, looking back at the 1966 conference as his aides were preparing for the '67 sessions, once observed that "rarely do you find any treatment of the mass-transportation topic as an integrated dilemma. The people involved in any one area talk to government, separately, for the most part. They talk to the newspapers, separately. They talk to one another only when they have profitable business to transact. And they very seldom get together just for the purpose of pooling their ideas for public benefit."

Stimulation once, stimulation twice

Luna recalls the reaction to the first conference: "People came to me and said they had profited from the experience. Some, including men with whom we usually disagree 12 months of the year, said the conference was one of the most stimulating events of its kind that they had ever experienced. One man, a leader in his field, pointed to a briefcase and said, 'I've got a whole year's homework in here.' Men who had argued sharply during the seminar sessions shook hands and went their respective ways in their respective modes of transportation." Initial feedback from the second conference seems to show no slippage in the acceptance quotient. About the only harsh comment heard dealt with the re-preaching of oft-preached sermons—but most people seemed to think this was offset by the inter-disciplinary mix and the free-form discussion it permitted. And small wonder, then, that the BRT staff headed back to Cleveland in a mood to start in again—planning for '68.

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New CW-62L microwave frees you from tube replacement problems... minimizes field maintenance...brings solid state reliability to 2000 MHz communication.

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There are no tubes, klystrons or mechanical relays in the CW-62L. Total solid state design results in better overall performance and a drastic cut-back in field maintenance requirements. The CW-62L is compatible and interchangeable with RCA CW-20 which has been serving industry for over 18 years. CW-20 users can add new CW-62L hops now and gradually convert their entire system to modern, reliable solid state microwave.

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☐ Send literature on CW-62L Solid State Microwave.

☐ Have RCA Microwave Specialist contact me.

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TITLE_____

ORGANIZATION_____

ADDRESS_____ PHONE_____

CITY_____ STATE_____ ZIP_____

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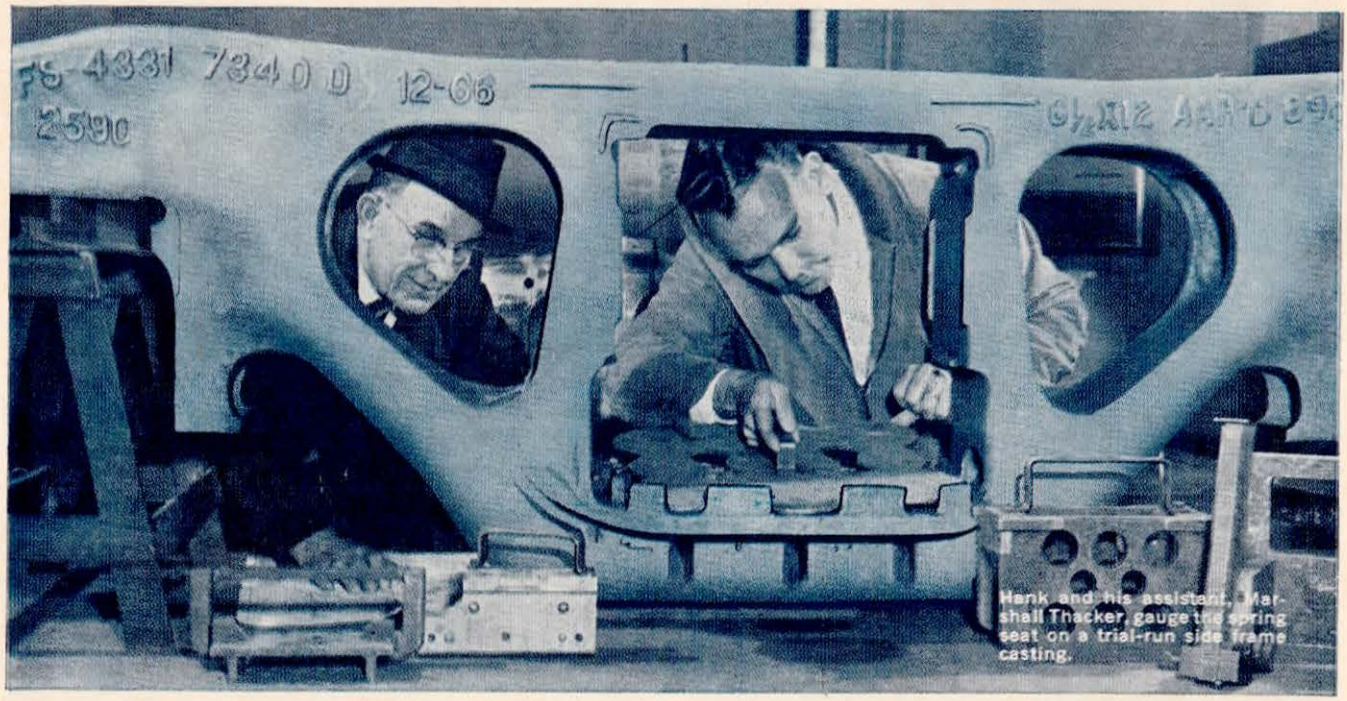
HERE'S HANK THILL...

A guy who looks for trouble...

EVEN IN A DREAMHOUSE!!



Hank and his assistant, Marshall Thacker, gauge the spring seat on a trial-run side frame casting.

Hank Thill is in charge of our quality control. He and his staff make literally thousands of critical inspection tests each week to insure that exacting specifications are met on our steel freight car truck castings. Hank's just trying to find trouble. When he does, it's back to the drawing board or pattern shop.

"Hank's Dreamhouse" is what some are calling the roomful of fancy precision measuring devices he and his men have assembled. But Hank doesn't mind the kidding. He's proud of his many years of contribution to the never-ending standard of excellence which each Scullin side frame and bolster must measure up to before final "OK' is given for production runs. We're not daydreaming in railroading's dynamic new age . . . *even if we do have a dreamhouse.*

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SCULLIN STEEL

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WEEK AT A GLANCE

Rate increases are a must says PRR chairman, and . . .

Wages and other rising costs make freight rate increases a regrettable but unavoidable necessity, Stuart T. Saunders, chairman of the Pennsylvania, said last week. "Our 1967 earnings will depend in good measure on how soon such increases can be obtained," he told the annual meeting of PRR stockholders in Philadelphia. Over the past decade, Saunders added, the railroad industry has reduced rates about 14%. "With the exception of the electric utilities, no other industry can make this claim. But in the face of a severe price-cost squeeze, we are now compelled to seek rate increases." If the increases come fairly soon and the economy continues to be resurgent, Saunders said, 1967 should be another good year for the Pennsylvania.

Saunders briefly reviewed the status of the Pennsylvania-New York Central merger case. The United States Supreme Court on May 8 upheld a lower court's refusal to block the merger until final arrangements are made for including the New Haven in the Penn Central system. "I regard this as a favorable development," Saunders said. "It is another indication, I believe, of the Supreme Court's intention that the merger should be consummated with as little delay as possible."

. . . Coming soon: "World's best passenger service"

"Within the next six months we will introduce the best rail passenger service anywhere in the world—the Japanese New Tokaido Line notwithstanding," Saunders also told the PRR stockholders. The service, between Washington, D.C., and New York, is being developed jointly by the railroad and the Department of Transportation. "The government is spending $11 million and we are investing about four times as much," the PRR chairman said.

Details about the forthcoming high-speed service were described by Allen J. Greenough, PRR president. The 50 stainless steel cars being built by Budd have been designed for top speeds of at least 160 mph, Greenough said. Forty cars will be coaches, of which 20 will offer food service at electronic snack bars. The other 10 will be parlor cars in which tray-style meals will be served to passengers at their seats. "When the new service is fully in effect," Greenough added, "we will operate trains at hourly intervals out of New York and Washington and at half-hourly intervals between New York and Philadelphia. . . . Total elapsed time between New York and Philadelphia will be reduced to as low as one hour and 15 minutes and the New York-Washington trip will initially be scheduled at a little under three hours. As we gain experience with the service and maximum speeds are increased, these schedules will be further reduced."

AAR fights revisions in train-off law

Legislation that would toughen the train-off provisions of the Interstate Commerce Act has drawn railroad fire. One proposed amendment to Section 13a would impose upon railroads the burden of proof that public convenience and necessity permit proposed train discontinuances. Another would give the ICC more time to consider train-off cases. Still another would permit the ICC, in ordering the continued operation of a train, to attach whatever terms the Commission found just and reasonable. The Association of American Railroads testified last week that the end result of these amendments "would be to make it more difficult and costly to eliminate unneeded and losing service and certainly prolong for an indefinite period of time the continuation of such services." The AAR's general solicitor, William M. Moloney, told a House Interstate and Foreign Commerce subcommittee that the industry's record of "capital expenditures for the betterment and improvement of passenger train equipment, notwithstanding the losing nature of such operations, scarcely paints a picture of disinterested and willfully destructive management. On the contrary," he argued, "it is the preference of the traveling public for the private automobile and the airplane, and of the Post Office Department for trucks and airplanes, that is delivering the knockout blow."

Rail-water routes as a merger condition?

A leading barge-line operator — F. A. Mechling, executive vice president of the A. L. Mechling Barge Lines of Joliet, Ill.—hinted last week that waterway interests may be ready to abandon their non-intervention policy in railroad merger cases. "The savings to be achieved from mergers by the elimination of duplicate and wasteful services may well be in the public interest and water carriers have refrained, up to now, from intervening," Mechling told a transportation conference at the University of Alabama. But the emergence of super-railroads may change all that, he added. "In merger proceedings it is usual to make conditions preserving the access of particular railroads to particular gateways or connections. A decision in a merger case represents a balance between the private interest of the merging railroads and the public interest in preserving access of other railroads to particular markets. It should be equally appropriate for the ICC to make special conditions maintaining independent competitive rail-water routes." He suggested that the ICC could impose such conditions on its own motion, or that the Department of Transportation could intervene "on behalf of the public interest." Or, said Mechling, "the water carriers could intervene to develop an appropriate record and request that specific rail-water routes should be developed and preserved in the public interest. Even where such rail-water service does not yet exist, the merger of competing railroads lessens the potential for opening such routes and therefore affects the public interest as well as the interests of the water carriers and the shippers."

GUS WELTY'S LINES ON LABOR

WELTY

TIME'S RUNNING OUT—or at least it's slipping fast away—for a sizeable slice of railway labor, which hasn't yet learned the words to the song-of-the-'60s. Yesterday's solutions are still being applied to today's problems. And it doesn't work. But even as some rail labor chiefs worry and fret about the instant situation, only in a few areas does there seem to be a willingness to experiment with new approaches, to work within newly-established frameworks and, maybe most important of all, to open the way for an influx of fresh thinking from the outside.

HOW MANY UNIONS, for instance, have available, as staff or on retainer, a really good, well-rounded economist? Or a pragmatic sociologist? Or a tough-minded industrial psychologist? Putting the question another way, how many unions get by as they've always gotten by—with men up from the ranks handling just about every function?

THIS IS NOT AN INDICTMENT of the traditional methods of developing union leadership. Nor is it a commercial for a gaggle of economists, sociologists and psychologists who would like nothing better than to have a crack at the challenge which rail labor affairs presents. These comments, on the contrary, are merely intended to point out that times, in fact, are changing—and to give an oblique recognition to a couple of organizations which want to move with the times.

ONE KEY ASPECT of change, of course, has to do with the right to strike: Is there, or is there not, an exercisable right? And if there isn't, what are the alternatives? A sociologist with railroad-type credentials of the most glittering sort recently ventured a few opinions on the problem—and his summation makes it pretty clear that the organizations are losing ground, and fast.

FIRST OF ALL, it appears that the right to strike, as a legalistic thing, has survived this long only because one-shot legislative moves have prevented its exercise. In other words, government intervention has saved the brotherhoods from the instant massacre they'd suffer if public opinion ever turned itself loose on an actual strike. But this kind of limbo condition may be too vague for even government to suffer for long. So then what happens? Well, as things stand, the individual employee, lacking the means to an organized withdrawal from service, could exercise his own option and find work elsewhere, if he so chose. In itself, that's a rather harsh option—but it's more than the organizations themselves may be left with. And that's why our sociologist friend—and others—think it's high time the unions stop trying to repeal progress and start learning to work with it.

...CT MATCH

...ahead ideas, backed up with 6 full support services ... that's what you get from Stromberg-Carlson. It's the combination that explains why over 50% of the major U.S. railroads that buy communication systems buy from Stromberg-Carlson.

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- ☐ Dispatcher Tone-Signaling to provide instant contact with key people responsible for train operation.
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- ☐ PABX Systems to meet the needs of railroad communications.

The services:

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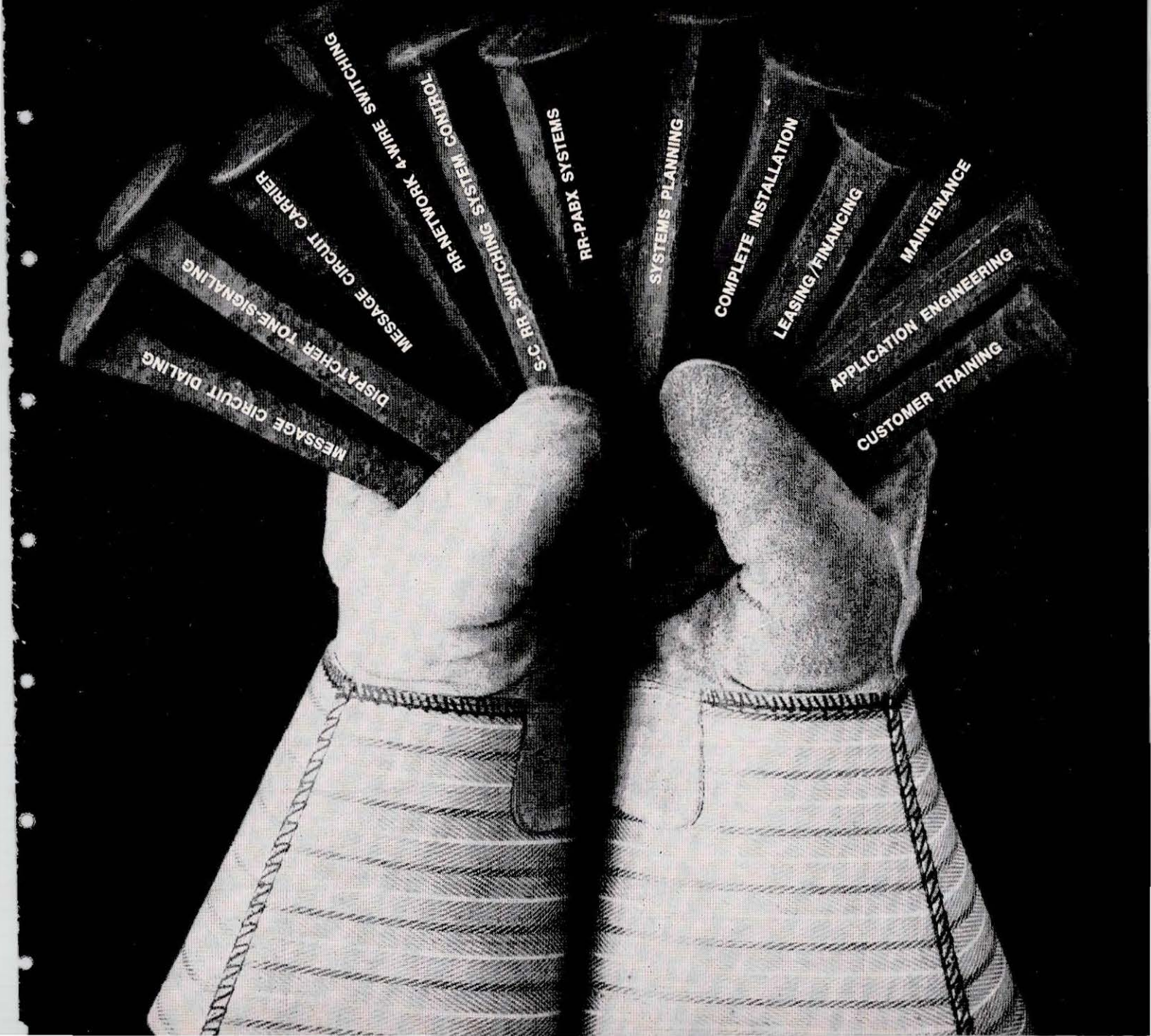


UNION PACIFIC RAILROAD COMPANY

(INCLUDING ITS LEASED LINES)

SEVENTIETH ANNUAL REPORT—YEAR ENDED DECEMBER 31, 1966

TO OUR STOCKHOLDERS:

The year 1966 was another successful one for Union Pacific. Net income rose to a record high level primarily as the result of a sharp rise in earnings from transportation operations.

Because of such favorable earnings, an extra dividend was paid to common stockholders, bringing the total common dividend for the year to $2.00—an all-time high—representing about 52% of net income (under generally accepted accounting principles) after preferred dividend requirements.

The Transportation Division handled the greatest volume of freight traffic in the Company's history and revenues increased substantially over 1965. Notwithstanding the record volume of freight business, the further increases in wage rates and fringe benefits, and an expanded track renewal program, operating expenses were successfully held to a relatively modest increase. This was accomplished through the savings derived from our continuing streamlining of operating methods and the economies inherent in our extensive program of equipment acquisitions and other property improvements during recent years.

Net income for 1966 on basis of accounting prescribed by the Interstate Commerce Commission with Divisional allocations, and as adjusted to conform accounting for Federal income taxes with generally accepted accounting principles, compared with 1965, are shown below:

Net Income	1966	1965	Increase or Decrease
Transportation Division	$ 95,370,005	$79,601,031	+$15,768,974
Natural Resources Division	11,480,129	11,747,732	— 267,603
Land Division	(371,863)	(74,944)	+ (296,919)
Non-Divisional	3,313,351	2,481,547	+ 831,804
Total (I.C.C. basis)	$109,791,622	$93,755,366	+$16,036,256
Adjustment—(Deferred Taxes)	(20,700,000)	(16,680,000)	+ (4,020,000)
Net income under generally accepted accounting principles	$ 89,091,622	$77,075,366	+$12,016,256

Modernization of our locomotive and freight-car fleet continued at an accelerated pace in 1966. Capital expenditures for equipment and other transportation property amounted to $207.9 million, substantially exceeding the previous record level for such outlays established in 1965. Of these expenditures, $23 million was used to acquire equipment for lease to Rock Island to assist in meeting its current service requirements. In addition to providing an attractive return on Union Pacific investment, this lease arrangement constitutes an important step toward the improvement of Rock Island properties contemplated under the proposed merger of the two lines.

Capital expenditures by the Land Division also increased substantially for the acquisition of industrial sites as an essential part of the over-all program of actively promoting industrial expansion on the Union Pacific.

In view of the very large outlay for new equipment and other property improvements in 1966, the Company found it necessary to obtain outside financing for a portion of such expenditures, to conserve working capital. Accordingly, arrangements were made to cover the cost of approximately $125 million of new equipment under equipment purchase obligations with varying terms and rates of interest. Additional financing is planned for 1967.

Public hearings began May 4, 1966, on the Union Pacific-Rock Island joint application to the Interstate Commerce Commission to merge the two companies, and other related applications. A substantial volume of evidence was submitted by Union Pacific and Rock Island witnesses to show that unification of the two railroads is not only a matter of urgent competitive necessity for both companies, but is also in the best interests of the general public. Testimony was also presented by witnesses for the other applicants and various intervening parties. The hearings are still in progress and are expected to continue for some time.

Effective January 1, 1967, several important changes occurred in the Company's management. Robert A. Lovett retired as Chairman of the Executive Committee and was succeeded by Frank E. Barnett, previously Vice President and General Counsel. Reginald M. Sutton was elected to the newly created position of Vice President—Finance, and Covington Hardee was elected General Counsel to succeed Mr. Barnett.

At the meeting of the Board of Directors held on March 30, 1967, Vernon F. Taylor, Jr., of Denver, Colorado, was elected a Director of the Company.

The Board of Directors acknowledges, with sincere appreciation, the invaluable contributions of our loyal and dedicated officers and employes to the successful achievements of the Company in 1966.

E. ROLAND HARRIMAN
Chairman of the Board of Directors

FRANK E. BARNETT
Chairman of the Executive Committee

EDD H. BAILEY
President

IC's microwave system is planned for profit

Annual savings from the road's $15½-million management-information system will top $5 million.

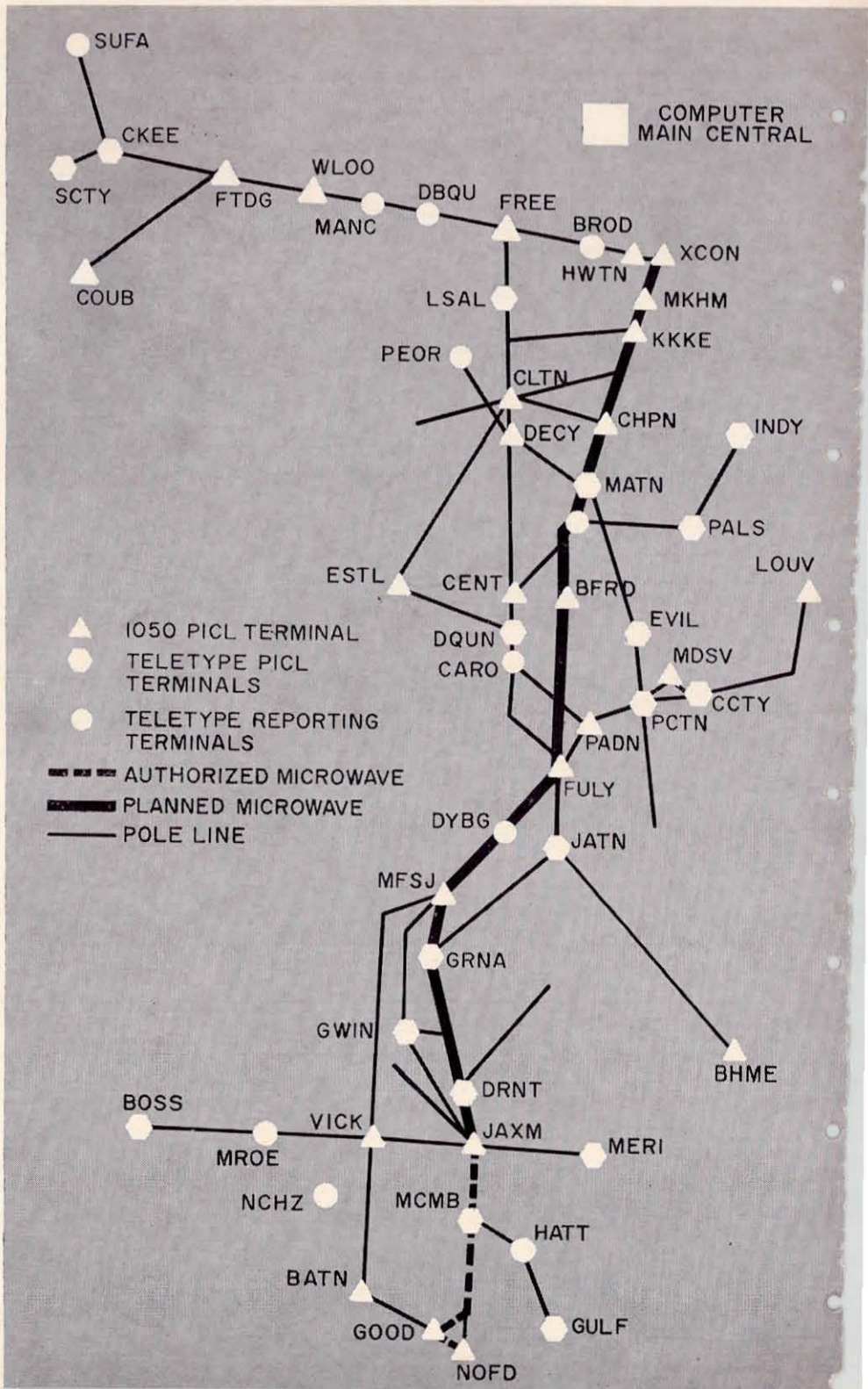
When Illinois Central announced plans for 180 miles of microwave last June, the news attracted little attention: many roads had substantial microwave mileage already in operation.

When, early last December, IC said it planned to build a $15½-million electronic management-information system called MAIN (for Mid-America Information Network), the news was still pretty ho-hum stuff: Such systems are already working or a-building on a dozen-or-so U.S. railroads.

But, here and there, the news got a second look. Long-time observers of what goes on at IC's fortress-like headquarters on the Chicago lakefront took notice: they were astonished at the sudden lurch-forward in MAIN's planning that the announcement implied. Some computer experts in the industry (many of whom had been talking to IC's planning people since the MAIN study began in 1964) were surprised by MAIN's simple structure and matter-of-fact schedule. A few security analysts began to thoughtfully weigh IC's decision to invest a good year's net income in a mixture of men, microwave equipment, computers, training programs and yard car-inventory systems.

● **The stakes are big.** Of course, the blockbuster figures weren't all on the investment side of IC's decision. IC insiders estimate the road's MAIN system will be one of the most profitable investments ever made by a railroad. MAIN will be paying its own way by the end of '68. Beyond protection of IC's competitive service and the road's position in the transportation marketplace, easily identified dollar-savings annually captured by MAIN should top $4,000,000 in 1969. By 1970, annual savings will top $5,000,000. In addition, the MAIN system when fully operational will provide the equivalent of up to 5,000 additional freight cars—equal to capital investment of $50 million.

And those sums reflect only the readily-spotted economies that MAIN will effect within the revenue limits



of traffic presently carried by the road. A continuation of the traffic trends that have steadily raised tonnage on U.S. railroads during most of the sixties could well make IC's investment in MAIN much better. Many experts predict the industry will handle much more than a trillion ton-miles of traffic by 1975. If IC were to just hold on to its share of that, MAIN's contribution to IC net income would increase—at a much greater rate than would a contribution from any other kind of capital investment.

● **Multi-level task.** IC is already pushing work on MAIN at many levels. Crews are already working on three of the four legs of microwave that will parallel the road's entire north-south main line. Talks with union officials concerned with the changes ahead in work and manpower because of MAIN have been held. More than 475 men in IC yards and terminals have been trained in IC's leased training car, with more than 1,000 to go. Recruiting programs for highly qualified and experienced manpower are in high gear. Adjacent to IC's lakefront headquarters, a building is being rebuilt from the walls out to house the MAIN nerve-center. The structure will receive an IBM 360-30 this month, a 360-50 in mid-year and another at the end of this year.

Design work and programming for the teleprocessing system and for revenue, disbursement and car accounting systems is already under way and scheduled for completion by year's end or by early next year. MAIN's operations and traffic reporting systems will become operational during the fourth quarter of this year.

IC's investment in MAIN is mounting fast. After starting with one-time and recurring expenditures of $336,398 in the final months of '66 (along with a modest outlay of $97,667 in capital expenditures), IC's MAIN investment will top $2,000,000 in one-time and recurring outlays plus $2,900,000 in capital expenditures by the end of this year. By the end of '68, when MAIN investment will start slacking off, IC's investment in the two accounts will pass the $9,000,000 mark—about half for one-time and recurring expense and half for capital investment. IC's outlays for MAIN will reach $15.5 million by the end of 1970.

MAIN's microwave network will serve as an arterial pipeline through which data will funnel from the system to IC's computer at Chicago—and back.

He heads the MAIN project
Richard P. de Camara

● **Planning preliminaries.** Two years of study and analysis preceded IC's decision to begin work on MAIN last December.

In 1964, IC's then-president Wayne A. Johnston appointed a four-man team to investigate the opportunities in computer management-information systems. The four men, representing operating, communications, accounting and traffic were L. T. Coyle (staff assistant) Frank Moran (assistant general freight agent), L. E. Johnson (director machine procedures) and George Pipas (general superintendent communications & signalling). They traveled extensively, visiting railroads already deep in work aimed at management-information systems. By late 1965, the group's ideas were shaping up. They held two briefing sessions for IC's staff. The staff liked what the group had in mind and they began working on plans for MAIN.

Then, dramatically, the project became just one of many folders on the desk of William B. Johnson, who took over as president of IC on May 1 of last year.

Wayne A. Johnston—who was elected chairman of IC's board the same day that W. B. Johnson was elected president and chief executive officer—had delivered quite a railroad to his successor. What one financial writer called "IC's splendid solvency" owed much to his leadership of the road for two decades.

A strong road with deep economic roots in the Mississippi Valley's industrial, agricultural, forestry and mining tonnage, IC's cash position was—and is—strong. Johnston had kept IC in good shape and also whittled away a substantial part of IC's long-term debt. The new president, on the other hand, was an ex-PRR lawyer whose entire career had been spent in companies nowhere near so fortunate as IC. W. B. Johnson's reputation as a corporate activist, in fact, was made after he took over the all-but-moribund REA Express and made a moneymaker of it—until the Post Office changed the ground rules for REA Express last year.

Industry wiseacres made poor puns about the "Johnson & Johnston medicine" afflicting the digestive habits of IC's brass. The uncertainty and fear that washes through a large organization whose leadership suddenly changes looked like a good bet to kill or seriously delay the MAIN project. Rail veterans know that tradition dies hard in the industry and that the life of a manager with change on his mind is hardly ever easy. Experienced observers have watched many such managers become dismayed by institutional hostility buried under deep layers of apparent agreement, action committees and hierarchical hanky-panky.

It didn't work out that way at IC. Insiders agree that Johnson—with help from Chairman Johnston—worked with consummate skill around the road's institutional barriers to change.

● **Promotion and piracy.** Taking maximum advantage of the cadre of enterprising officers whom Wayne Johnston had brought along toward staff rank in recent years, Johnson judiciously promoted promising men and added key men from the outside. He successfully avoided the kind of corporate bloodshed that often accompanies major change in management—and saved IC the many months of shocked inaction that usually follows. Some IC men even cheerfully describe the new men IC has recruited from other roads as a "return" for the men who left IC in years past to fill important posts in industry organizations and on other railroads.

Now, a year after the Johnson administration began at IC, spirits are high on the railroad. The successful marriage of IC's old virtues and its new drive sparked some complex decisions and fast implementation schedules for MAIN.

Quickly after W. B. Johnson's arrival at IC, MAIN's original four-man group resumed planning at an accelerated pace. They reviewed the entire

IC drew on the experience of other railroads

project with an outside consulting firm and then presented a final briefing to IC's new president and the road's staff. MAIN's mechanics were direct, its objectives attainable and its return-on-investment overpowering. Seven months after taking over at IC, Johnson and the IC board gave a green light to the MAIN project.

• **First, a new set-up.** IC created a new department to build and operate MAIN. Johnson turned to the Frisco for a man to head up the project. Richard P. de Camara was elected vice president—information and controls systems for the IC Nov. 1.

The new vice president organized the MAIN department into five sub-departments, each to be headed by a director responsible for building and, later, managing, a vital sector of MAIN. De Camara appointed two of IC's original four-man planning group as directors and a third man from the group as number two man to another director. George Pipas was named director of communications. Lou Johnson was named director of data processing and "Rit" Coyle was named assistant director of data control.

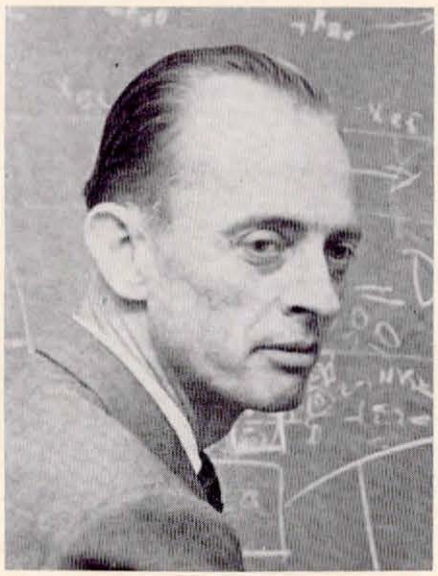
Vice President de Camara went to the outside to fill the remaining directorships. "There just weren't men on the property with the special kind of expertise MAIN requires," he recalls.

He got two of his directors from the Louisville & Nashville—a road that is in the front rank of railroads with successful management-information systems already operating. W. H. Thompson was named director of data control. A. K. McKechnie was named director of methods, systems design and programming. Both men had played key roles in the development of L&N's computer system.

The fifth director for MAIN was hired from Melpar, Inc. As director of service evaluation R. Waldner is charged with the responsibility for giving IC the same watchdog capability via MAIN that enabled Frisco to dramatically improve car-mile and utilization ratios.

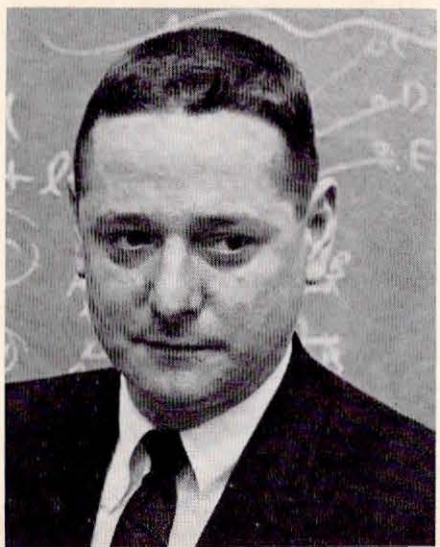
• **Adaption, not invention.** Somewhat surprisingly in an era when many railroad officers pant for recognition as innovators, MAIN's leaders cheerfully admit that MAIN's antecedents can be spotted on a dozen other roads. They remind you of the obvious: IC's original quartet of researchers looked at the systems of a dozen other roads. Further, the men putting MAIN together reflect many man-years of experience on roads that led the way into the systems era. And de Camara is quick to note that IC can "take advantage of the information clearing house that is beginning to exist in the Data Systems Division at the AAR—something that didn't even exist when a few roads began pioneering in this area in the early sixties."

Director of Data Control
W.H. Thompson



Director of Methods
A.K. McKechnie

Director of Data Processing
L.E. Johnson



• **Total involvement?** When MAIN is completed, the system will directly touch the work of almost a third of IC's total employment. A steady stream of IC's top officers have been going to computer cram courses. Director of data control Thompson estimates that about 6,000 employees will become involved in MAIN training of one sort or another. "They fall into two groups —roughly 3,000 ops and 3,000 non-ops. We're not only involved in the training of people directly involved in computer work and communications work, but also in the training of the round-the-clock shifts of men who will operate PICL yard systems and all the other men and women whose jobs will change because of MAIN."

What about IC's brass? De Camara makes an interesting point about the head of steam behind MAIN. "Middle-managers are coming around very quickly, as MAIN's usefulness becomes more and more apparent. And, of course, this is absolutely necessary—because they, by and large, are the ones who will use MAIN.

"Above the middle managers? There you'll find a unique situation at IC. Both the operating vice president and the comptroller were agitating for a system like MAIN. The topside environment makes it possible for things to get done with dispatch. IC's departmental barriers are lower than they are on any railroad I know of.

"We're making quick progress because we were able to take advantage of what has been already accomplished on other roads and can thus avoid the expensive, time-consuming pitfalls that complicated the progress of the pioneers in the field. We're also able to move quickly because we planned well. Not that we have avoided all mistakes. We've had some lulus—but we've learned from them."

Organization is probably the most original aspect of MAIN, says de Camara. "Consider what Bill Thompson does—outside the operating department. Only the Denver & Rio Grande Western has had its top communications officer in the computer department. Communications is more vital to and less separable from computers than it

ever was to railway signalling. Communications is a function of management while signalling may more properly belong to the maintenance of way department than be paired with communications. Railroads have not fully married the disciplines and technologies that go into successful management-information systems. We are trying to do that here."

● **All systems on time.** MAIN's directors report on-schedule or ahead-of-schedule status for all projects.

Director of data control Bill Thompson says, "We started meetings between MAIN people and labor relations people very early in the work. We met with union representatives and outlined our plans and requirements. We're encouraged by the sessions where we've told them while they may lose some jobs, others will be substantially upgraded.

Director of Communications Pipas says that IC needs and will get more technicians and professional people. "We plan to maintain our own communications network. We need communications engineers who can become expert in dealing with the interface problems between communications media and computers. The entire spectrum of communications media, from microwave to telephone, is being geared for MAIN's maximum effectiveness as an operational tool and as an extension of management's ability to make decisions and manage—in time to meaningfully influence results.

Built-in flexibility

"Examination of coaxial cables for imput to the computer from certain locations, a test for optical scanning equipment made to read hand-written numbers and other such work is proceeding in parallel with MAIN as promulgated in original planning.

"If some new technique or hardware is proved out at any point in the project, we'll switch without a moment's hesitation."

A. K. McKechnie, director of methods, systems design and programming, has most of his staff already hired. "We plan to have 45 systems analysts—and we already have 42." Director of Data Processing Lou Johnson feels that a great plus for MAIN will come when IC's computer building is completed—and the directors and their staffs move into close proximity with one another and with IC headquarters staff generally.

MAIN's new headquarters is a four-story building. The available space prompted a recent visitor to ask if provision wasn't being made for the possibility that MAIN's basic structure might have to be changed from a terminal-oriented imput to a central-input system at a future date. For example, if qualified manpower is too hard to get and keep out on the railroad and/or if imput quality is too difficult to maintain from so many different imput points.

IC's MAIN officers agree the new facility has the space and environment to switch to a Southern-style imput—a roomful of IBM 1050s operating directly from waybills sent to the computer by microwave facsimile transmission.

The IC's new microwave network will also have capacity enough to handle facsimile transmission. IC has even provided for the possibility of direct data input via cathode-ray tubes with typewriter keyboards. This would permit visual checking of input and instantaneous computer editing.

Does this mean IC is not sure of its philosophical alignment on the side of the railroads that feel such imput cught to be generated in yards and terminals?

"No," says de Camara. "We feel that this is best for IC—both philosophically and practically. With this kind of set-up, our divisions can be as informed as our system. Such knowledge, we feel, is valuable to operations."

Bill Thompson, whose work keeps him out on the IC for weeks at a time, makes a further point: "The interaction of people doing railroad work and MAIN work is often productive. We can't know everything. The people who'll make MAIN work will probably have as much to contribute to MAIN as the system managers will."

Adds de Camara: "Also, MAIN will tend to produce a new kind of middle-management. We haven't gone to the 'war-room' kind of system because it doesn't seem to be best for IC—even though by location and intent MAIN will offer the general superintendent of transportation swift control and decision power over most of the system. We do, however, have options built into the basic system. We feel that we'll have the best operations-control and management-information system in the industry when we're through."

Judging from the magnitude of IC's profit expectations from MAIN, de Camara's superlative could be justified. Many experts feel the "identifiable" items that make up that figure amount to less money than will result from increased business attracted by better service and the more competitively priced services that will ensue. IC shareholders could do some happy arithmetic about MAIN: The system could add something close to $1 per share in earnings to IC common stock.

IC's MICROWAVE:

Costs get cut all along the line

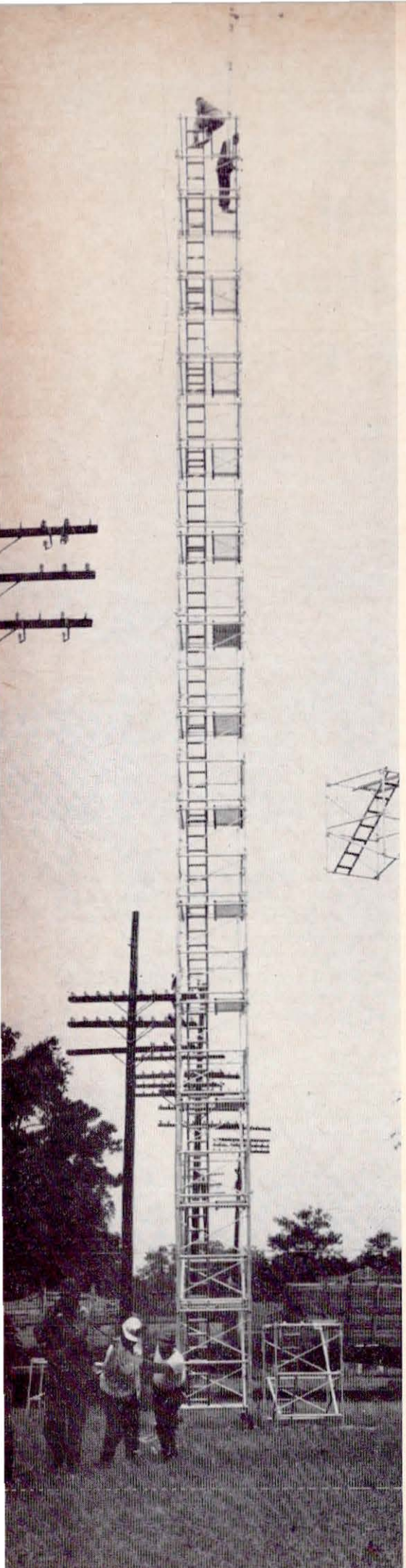
Yearly communications savings are expected to top $500,000.

George Pipas, IC's director of communications, says a practical fusion of communication and computer capability is a must—if a management-information system is to be effective.

As one of the five directors of IC's MAIN team in the Information and Control Systems department, Pipas is already deep in the planning of a microwave nerve system for the Mid-America Information Network. IC's director of communications (formerly the road's general superintendent of signals and communications) was a member of the four-man study group that prepared the original recommendations for a railroad system-wide information network.

The essential combination of communications and the computer were early discerned by the study team. The communications function is a major factor of information acquisition, says Pipas. Reduced to essentials, the function of the new information network, he says, is to collect data from all over the railroad and transmit it to a central computer headquarters in Chicago. There, the data is processed into meaningful reports, which are transmitted to appropriate supervisory personnel at key offices along IC's 6,000 miles of line. Also, included in the communications planning, is the determination of off-line requirements to service 47 traffic offices in the U.S., Canada and Mexico.

● **Car moves vital.** As might be expected, car location information requirements bulk large in MAIN's scheme of things. To determine communications requirements for handling this information, car counts were taken at yards where cars are waybilled or received in interchange. This information was developed by computer runs covering several months to provide typical average figures. Addition-



Director of Communications
George Pipas

ally, samples of present traffic were analyzed (with the help of the computer) to determine the number of lines of data transmitted. For example, all cars move on a consist/movement card (about 1 line of data), and all loaded cars have a second card (waybill/traffic) of data. Data transmitted as expected, closely parallel car volumes handled at the various terminals.

From these studies, the following communications equipment guidelines were established:

—Teletype reporting terminal would be one that handles less than 200 cars per day in and out (double count).

—IBM 1912 (paper tape transmission) yards would handle 200 to 400 cars daily, in and out.

—IBM 1050 (punched card transmission) yard will handle more than 400 cars daily, in and out.

As now planned, IC will have 11 Teletype reporting terminals, 18 IBM 1912 yards and 26 IBM 1050 equipped yards.

● **150 words per minute.** The punched card transmission units, IBM 1050's, will be operated on a 150-band circuit at 150 words per minute. IC is conservatively planning to work four 1050's on one microwave voice channel, although up to seven can be so accommodated.

The communications input/output devices at the various yards and terminals will be terminated on an IBM 2703 communications control unit in front of an IBM 360/50 computer at Chicago A predetermined pattern of polling of these devices will be programmed.

At the larger terminals, where there is considerable waybilling and interchange of cars (more than 400 cars daily), 1050 units will be directly connected to the computer via assigned circuits. For example, of the six 1050's at Memphis, two will be on individually assigned circuits to the Chicago computer. The other four units will be paired on two party-line circuits. Party-lining will be typical where volumes do not justify individual circuit assignments.

Similar arrangements are made for the yards having Teletype or IBM 1912 paper tape transmission units.

● **Administrative messages.** Traffic studies were also made of the volume of administrative messages handled over the railroad.

Concerning voice traffic, studies were made of present requirements as well as of the expansion in traffic expected when the entire railroad will be completely equipped with DDD (direct distance dialing) service. On Oct. 1, 1967, dial equipment will go into service to serve the Chicago general office.

From these studies, determinations were made of the present and estimates of future requirements for voice and data. Also, IC's communications plans call for complete train-to-wayside radio coverage along mainlines. Wayside radio stations are to be remotely controlled, enabling direct contact with moving trains, as well as M/W crews and others along the right-of-way.

All these circuit requirements indicated that "big pipe" communications was the logical answer to handle IC's requirements along its mainline. Accordingly, Pipas' group added microwave planning to their communications efforts.

Preliminary microwave station sites and path routes were determined by the communications department from an analysis of topographic maps. Where possible, sites were chosen on IC property. For the few locations (about 50%) that are off IC property, the necessary land has been purchased.

To insure that line-of-sight transmission is possible, the communications department used two portable aluminum towers (102 feet high). Starting at New Orleans and working northward, towers were set up at adjacent sites. Men climbed to the top of the towers and after establishing radio contact, used a special signaling mirror to flash sunlight to each other. When working at night, a white revolving light was used. The observer noted the flash of sunlight or the white light. The signalman and the observer would

climb down their respective towers until they lost sight of the light or sunlight flash. Their elevations were carefully noted. Resorting to graphical techniques, formulas, and adequate clearances, tower height for a clear path for the microwave signal was determined.

• **Microwave under construction.** The New Orleans-Jackson, Miss., 176-mile microwave system is nearing the construction stage. The contract for this section is being handled by Lenkurt Electric Co., Inc. Also, Lenkurt is making path surveys and checking a preliminary routing for microwave between Jackson and Chicago. Contract for the towers for this first link will soon be let. Armadillo Mfg. Co. is installing the microwave equipment, wiring and power supplies in fiberglass housings, which will be hauled to the station sites and set in place atop concrete foundations.

The New Orleans-Jackson microwave link is to go into service later this year. Planning will continue on the rest of the system, which is now scheduled for a late 1968 or early 1969 cut-in date.

Until the IBM 360/50 computer goes into service (due Nov. 1, 1967), the car movement data will be handled by Teletype equipment. Beginning about Sept. 1, 1050 units will be placed in service, operating initially on leased circuits. The present microwave is planned for 420 voice channel capacity, but it can be expanded to 600 voice channels.

• **Savings, too.** There will be savings as a result of installing the switching computer, microwave and its associated communications network for the MAIN system. For example, there will be reduced telegraph relay office expense. There will be considerable retirement of copper line wire now serving through communications circuits. Present planning calls for open wire circuits to remain for message, dispatchers' and other local communications circuits after the microwave system is in service. Present plans call for microwave from New Orleans to Chicago. However, studies will be made as to the economics and advantages of some stub systems to key points such as St. Louis and Council Bluffs.

Plans are also under way for consolidating dispatcher locations and moving CTC machines to central locations. Another improvement is anticipated from installation of dial switchboards with the changeover to direct distance dialing. Total savings in the communications area alone are estimated to be well over $1 million through 1969. Annual savings of at least $500,000 are anticipated after that date.

IC's MICROWAVE:

Better car utilization will be assured

When fully operational, Illinois Central's Mid-America Information Network will contain 44 Perpetual-Inventory-for-Car-Location yards. Locations handling at least 200 cars daily in and out will have such systems.

• **Punched card file.** Each of the 44 yards will maintain a punched card file of cars in the yard. When a car comes on line or is waybilled, a car is keypunched at the first location with a punched card input device. The car initial, number and other information, either contained in the waybill or required to move the car, will be keypunched. Generally, a loaded car will require two cards: a consist/movement card and a waybill/traffic card. An empty car will normally require only the consist/movement card.

Each PICL yard will create cards for cars received in interchange at the locations, or for cars entering the yards from a nearby interchange point not equipped with keypunch equipment. Also, a PICL yard will create cards for cars waybilled at non-PICL yards. PICL yards will receive punched cards from other yards concerning cars moving to them.

Thus, at each PICL yard, there will be at least one punched card for each car in the yard. A PICL file will be established at these yards with cards filed in sequence as the actual freight cars are located on the tracks in the yard. Initially, the PICL file will pertain to yard tracks, but as the system becomes fully operational, industry switch runs will be included.

As cars are moved, say from a yard track to an industry siding, the PICL file will be updated.

• **Accuracy is important.** To assure that yard clerks and other yard personnel (such as telegraphers) prepare the car data as accurately as possible, IC is providing special training. A remodeled passenger car ("Main 19") has been equipped with IBM 1050 and Teletype units as well as other IBM equipment that will be used at PICL yards. This special car has been and is being spotted at PICL yards for training of yard personnel. A two-man instruction team is used on the car. The two men instruct the yard personnel on the use of the new equipment.

KEEPING TABS on freight cars via punch cards are (l. to r.) Richard P. de Camara, Illinois Central vice president—information and controls systems, and W.H. Thompson, the road's director of data control.

Some of the equipment, particularly the IBM 1050 units, will be new to the yard clerks. However, these units have electric typewriters as the keyboard unit. Clerks are required to type at least 30 words per minute. For smaller PICL yards, under 400 cars per day, in and out, teletypewriter units will be used for data input to the computer.

In addition to training in the special Main 19 car, teams of five or six men will visit PICL yards to implement the program.

• **Equipment already on-line.** Even as personnel training has been mounting, IC is installing IBM equipment at PICL yards. A task force under W. H. Thompson, director of data control, has been supervising this phase of the PICL program, as well as the training of yard personnel.

Target date for placing PICL yards in service is August 7 of this year.

IC will have 30 major terminals using IBM 1050 units for data input. These will be PICL yards. An additional 18 PICL terminals will use IBM 1912 or similar input devices.

• **PICL payoff is big.** The PICL system is expected to improve terminal operations, provide service evaluation data, and reduce car detention. By knowing where cars are in a more exact sense (empty in yard or empty but waiting for load at shipper's dock), IC anticipates much better utilization of its freight car fleet. ■

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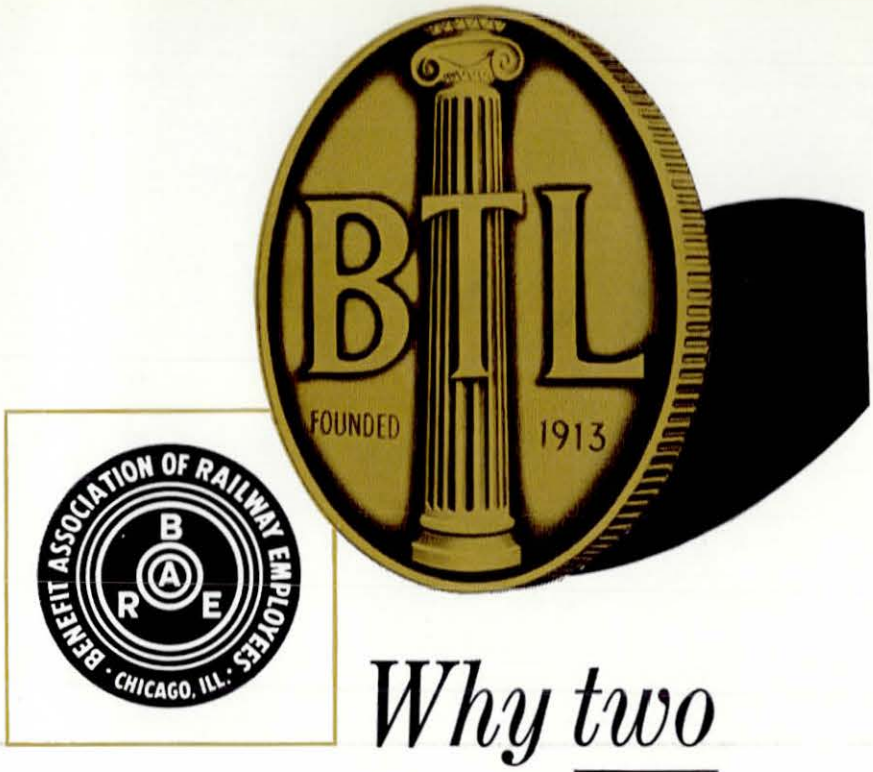

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High priority urged for urban transport

The problem of out-of-focus objectives is still confounding urban-transportation planners—but there are signs that the objectives are becoming more objective, and less objectionable.

Two views of the goals, methods and procedures came recently from a pair of long-time students of the urban scene—and there was a high degree of agreement expressed, by J. Douglas Carroll, Jr., executive director of the Tri-State Transportation Commission, and by Sen. Harrison A. Williams, Jr., author of the 1964 mass-transit capital grant program and sponsor of a follow-up commuter-service bill in the present Congress.

● **What price the moon?** Carroll and Sen. Williams used similar comparisons to emphasize their point—that the country has been on a "millions-to-hit-the-moon-but-darn-little-to-get-a-man-to-work" kick for too long; and that reassessment of transport development and re-balancing of financial resources must come.

Carroll brought the point home, hard: "In my fantasies in dozing moments, I wonder what would happen if the Russians claimed they were designing the world's most efficient and trouble-free urban transport system. Perhaps this would give us the incentive we need to direct our collective development energies on the more mundane problems of getting to work."

● **Why the lag?** Tri-State's executive director sees four factors contributing to the lack of attention given to urban-transportation problems:

—First of all, urban transportation difficulties "do appear to be chronic. They have been with us for some time, and they are likely to continue to be so. It's doubtful that one quick burst of national effort will carry us to a well-defined new and more satisfactory level of performance."

—A second element is age, and "being old, urban transportation has acquired a great number of vested interests. There are great investments in the status quo. . . This great accumulation of people and institutions is resistant to change and represents such a diversity of interests that there is unlikely to be ready agreement on a

particular course of action. Therefore, progress is likely to be evolutionary, for there is a substantial and built-in resistance to any rapid or sudden change."

—Still another problem is "the change in the relative strength of cities to solve their own problems. . . . Today, the cities have been outgrown. Higher-income residents and much business and industry have gone to the suburbs. The cities have inherited a much greater concentration of the disadvantaged. The greater services required by this changing population in conjunction with an older, more depreciated capital plant have caused money demands to increase rapidly, yet over a base less able to supply funds."

—Finally, there is an "unreal balance between private enterprise and public responsibility."

● **The time is now.** Carroll takes a blunt view of the needs: "The time is at hand when national policy, in partnership with state policy, must reassess the objectives of transportation development. Much more attention is required in the urban areas. A rebalancing of tax resources must be found if we are to raise the funds needed to improve and rebuild our older cities. Increased public support is inevitable."

● **New slant on subsidy.** Sen. Williams, who appeared with Carroll at the second annual Brotherhood of Railroad Trainmen's conference on urban transportation in Chicago, put emphasis in his paper on a commuter service bill—which would "authorize the federal government to pay up to two-thirds of out-of-pocket operating losses attributed to commuter service."

As the New Jersey Democrat outlined the program, "this would not be a permanent subsidy. It would not be given directly to the company operating the commuter line, and it would not be dealt out to just anyone with his hand out. To qualify for this payment, the commuter line would have to submit a plan showing how it could and would put its service on a break-even basis within 10 years. . . . It would give railroad managements which have thrown up their hands in despair a new interest in making commuter business pay. It would bring forth leaders . . . who would supply the imagination and drive required to get people off the highways and into railroad cars."

Carroll was tabbed to give the first special BRT lecture on urban transportation; Sen. Williams was the closing speaker at the three-day seminar, which drew participation from about 75 representatives of government and the transportation, manufacturing and educational fields. ■

WATCHING **WASHINGTON** WITH WALTER TAFT

TAFT

SOME PASSENGER RUNS SALVAGEABLE?—The ICC has offered to cooperate with the Department of Transportation in seeking a solution of the railroad passenger-service problem. This was reported by Commissioner Laurence K. Walrath in a recent address to the Southeastern Association of Railroad and Utility Commissioners. Walrath suggested that the state regulators might want to create committees on national and regional bases to work with the Commission, D.O.T., governors' conferences and other interested public bodies.

The objective would be "salvaging the remaining essential rail passenger system," as Walrath put it. He explained: "The answer does not lie in forcing privately owned railroads to operate uneconomic passenger services. We must in some way determine which passenger services the public will require as essential. Having done this, the best brains in the nation . . . must assess their respective responsibilities and stakes in the outcome and do what must be done."

SADDENED COMMISSIONER—The Commissioner came up with this proposal after recording his sadness that "so few of those who might have benefited" did "so little" to implement recommendations of the Commission's 1959 report on its investigation of the railroad passenger deficit. The report's general conclusion was that the passenger business had a future if it could be converted into an "economic" service—a "less-expensive network more closely tailored to the needs of the public."

There were also specific recommendations, including calls for Congressional studies of railroad working rules and subsidies to railroad competitors, for community support of losing commutation services, and for repeal of the federal excise tax on fares.

MANAGEMENT TRIED HARD—While the Commission had some recommendations for railroad action, it rejected suggestions that railroad managements had not tried to keep passenger business. It found evidence that many roads had "conscientiously endeavored to improve the standards of service," and that railroads generally had not dropped trains "without serious efforts to make them pay, and only after sympathetic consideration of public convenience." The recommendations for management called for further elimination of duplicate services, more experimentation with new types of equipment and continued efforts to improve services.

LOSSES FROM INACTION—More implementation of these 1959 recommendations than they got would have averted "many train losses," Walrath said. More specifically, he called the New Haven and Jersey Central receiverships "examples of economic setbacks from passenger losses which might have been avoided." Two years after this 1959 report, there came a Commission call for direct federal subsidy to preserve "essential" railroad passenger services. This recommendation was made in a report on NH operations and practices as they affected that road's passenger services and rates. It was repeated in the Commission's next annual report which went to Congress in January 1962. The proposal got a cool reception on Capitol Hill and was not in subsequent annual reports.

A Commission passenger-service program now to the fore in Congress is that embodying its proposed tightening of the Interstate Commerce Act's Section 13a. This bid for more power over train discontinuances includes calls for seven months (instead of four) to consider train-off notices, authority to impose conditions in orders requiring trains to be continued, and a shifting of the burden of proof to railroads proposing the discontinuances. Walrath's speech included an expression of the Commission's hope that the state regulators would support this proposed legislation, which the railroads oppose.

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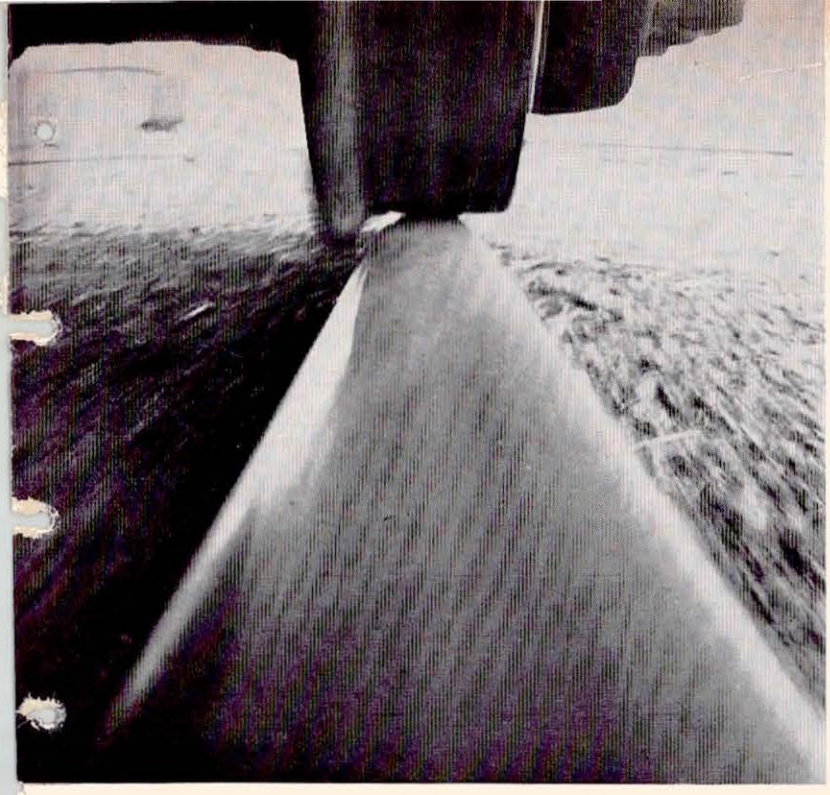
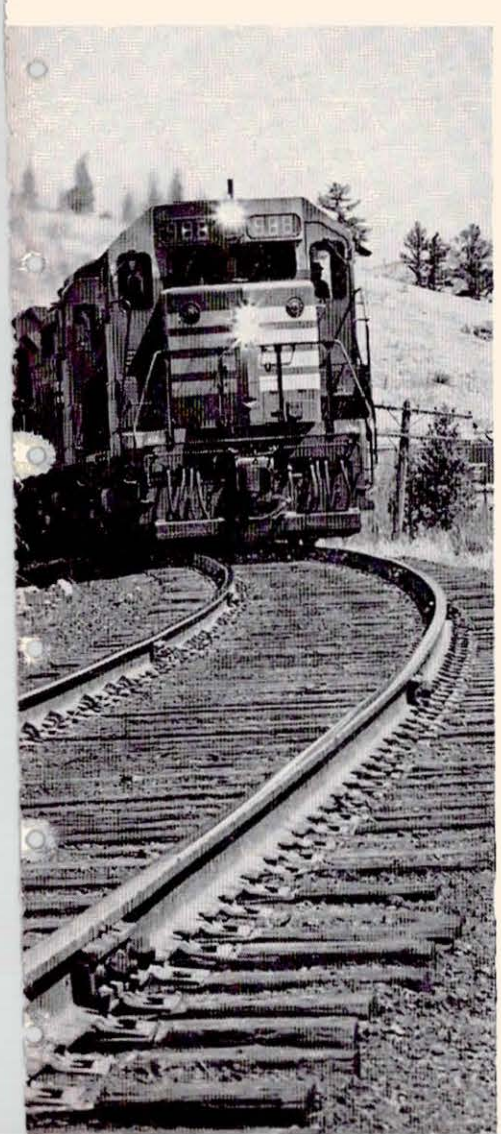


corners . . . on curves and grades



Heavier freight loads moving at higher speeds are signs of progressive railroading, but resulting excessive wheel loads are hard on rail. Gauge corner shelling, metal flow in the head, and abrasion cut rail's useful life on curves, grades, and other sections where stresses from wheel loads are severe.

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Hi-Si is only one of the steel products CF&I has developed in cooperation with Western railroads. In the past eighty years this partnership has proven time and again, that railroads can rely on CF&I for improved products, technical assistance, and on-time delivery—all part of CF&I Service in Steel. CF&I Steel Corporation, Denver, Colorado.

CF&I
STEEL

LUTHER MILLER

AS THE EDITOR SEES IT...

IT TAKES MORE THAN BOMBS—In any country's defense arsenal, railroads are still a powerful and irreplaceable weapon. That point was underscored for us the other day during a conversation with General Braejon Lee, director of operations for the Army of the Republic of Korea. He recalled the great role played by the railroads in the Korean War, when they proved to be virtually indestructible. As the man responsible for 45,000 Korean troops now fighting with U.S. forces in Vietnam, General Lee has more than a passing interest in the transportation system of that country.

Perhaps no greater tribute can be paid to railroads (he reminded us) than the fact that the U.S. Air Force has so far been unable to permanently disable the railroad supply lines of the Vietcong. The VC maintain repair materials at trackside, and within hours of the most withering attack the trains are running again.

Military men know that railroads are as important to our defense as anything the space-age scientists have been able to come up with; we hope Washington also knows this. What bombs can't accomplish, government neglect on the one hand, and favoritism on the other, can bring about all too quickly.

FROM 334 MILES TO 212,000—People on the Long Island Rail Road were pretty sad last week over the loss of their president, Tom Goodfellow, to the AAR—but LIRR's sprightly, twice-a-month newspaper, the Long Island Railroader, couldn't help crowing a little. The Railroader reported the news this way:

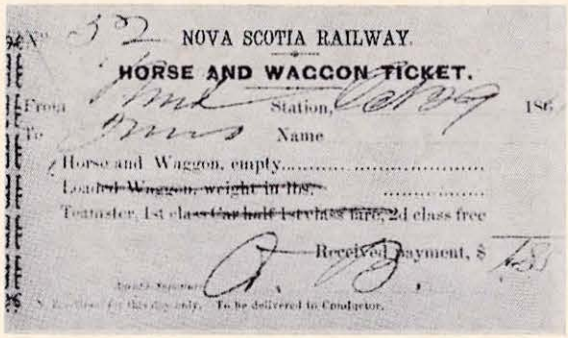
"The organization that represents all the nation's major railroads (212,000 miles of line and 639,000 employees) has picked the president of our railroad (334 miles of line and 6,700 employees) to be its new chief executive officer."

Actually, Tom Goodfellow may not find his job at the AAR a lot harder than the one he took on nearly 13 years ago at the Long Island. He not only turned that troubled and scorned railroad into a showcase commuter carrier; he also won for the Long Island a firm place in the affections of its customers. The combination of good equipment skillfully utilized, and smart public relations, proved to be a winning one.

Mr. Goodfellow told a reporter for his own newspaper: "I firmly believe railroads are going to play an increasingly vital role in our nation's development and prosperity, and I'm looking forward to this opportunity to help keep them on the express track toward unprecedented service and accomplishment."

We can't think of a better man for the job.

CANADA STARTED IT—Piggyback is often referred to as the railroads' fast-growing baby; actually this baby is at least 112 years old. The ticket shown below was good for the passage of one horse, one wagon and one teamster over the Nova Scotia Railway from Halifax to Truro on Oct. 29, 1864, nine years after that railway (now part of the CN system) initiated the practice. The 60-mile journey cost $1.85 for the wagon (on a flat car), the horse (in a box car) and the driver (who rode in a coach).



NOVA SCOTIA RAILWAY.

HORSE AND WAGGON TICKET.

From ... Station, ... 186

To ... Name

Horse and Waggon, empty.....

Loaded Waggon, weight in lbs. .....

Teamster, 1st class ~~(or half 1st class fare,~~ 2d class free

Received Payment, $ 1.85

"Super-subway" for New York?

A 34-mile, deep-level high-speed "super-subway" has been proposed for the New York area. Utilizing the so-called "Gravity-Vacuum Transit" (GVT) concept, the suggested line would run from Mt. Vernon to Staten Island. It would serve part of the Bronx, Manhattan's East Side, and western Brooklyn, with 28 intermediate stops. Estimated rush-hour travel time between Mt. Vernon and 42nd Street is 20 minutes; between the latter point and the Staten Island terminal, 28 minutes. Capacity, with trains on two-minute headways, is put at 75,000 passengers per hour in each direction.

The proposal itself was outlined to the New York press last week by Lawrence K. Edwards, former aerospace systems executive with Lockheed Aircraft Corp., and now with Tube Transit, Inc., of Palo Alto, Cal., who put the total cost of the New York system at "less than $500 million."

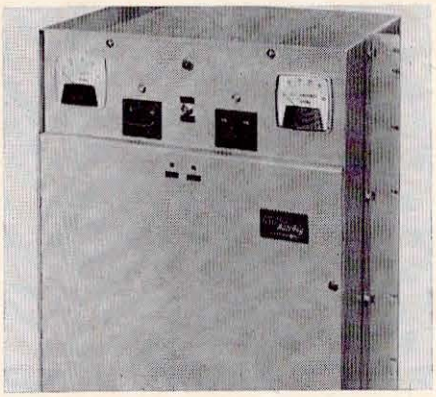
The system itself, as Edwards describes it, involves twin steel tubes just under 10 ft in diameter, suspended side by side in a concrete-lined tunnel. The spring suspension system, he said, would virtually eliminate vibration.

Stations, typically, would be 60 to 100 ft underground, and reached by high-speed escalators. Between stations the tunnel would arc down and then up. The resulting parabolic shape, Edwards said, would permit fast acceleration and deceleration, while holding down to acceptable limits effects felt by passengers. In addition to gravity, the other source of power would be an almost complete vacuum created ahead of each train by commercially available air pumps or compressors.

"Trains" would be cylindrical, pressure-tight capsules, just 2 in. smaller in diameter than the tubes. They would be guided by single-axle, double-flanged wheels recessed into the capsules and riding on essentially conventional rail, welded continuously and to the tube interiors. Coupling between units would be rigid, but trains could still negotiate wide-radius curves. For New York, Edwards suggested a train 1,360 ft long and holding 2,500 passengers.

The GVT concept, Edwards told the press, can be used equally well in other cities, or between cities, as, for example, in the Northeast Corridor. ■

NEW **PRODUCTS** REPORT



Battery Charger **(RA-1)**

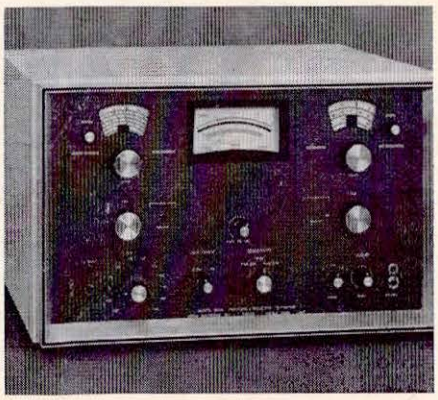
This new 48-volt, 50-amp charger with silicone controlled rectifier features a transistorized plug-in SCR control module. The unit also contains surge protectors and an AC power failure alarm relay. The charger may be connected in parallel with other constant-potential chargers without modification, providing it is not required to share the load equally. Current limiting is factory-set at 115% of full load rating *C&D Battery Div. of Eltra Corp.*

FM Monitor Receiver **(RA-2)**

Increased sensitivity for improved reception in weak signal areas and high selectivity for greater protection against interference are featured in a new solid-state monitor receiver for 25-50 mc and 132-174 mc communication systems. Automatic standby lets an internal nickel-cadmium battery supply take over in event of ac power failure. Decoder options may be mounted internally for signaling or alarm. Channel Guard option is available. *General Electric.*

Sweep Generator **(RA-3)**

Basic specifications of a new solid state miniature sweep generator are: Sweep width—20 hz to 20 kHz; sweep speed from 6 to 60 sec; output 2.5 v into 600 ohms with 80 dB attenuation range. Four sweep modes are switch selected. A dc control ramp voltage programs the oscillator in the two automatic sweep modes. The unit functions in the third mode as a single range tuned generator. The fourth mode permits frequency programming from external sources. *Waveforms Inc.*



Wide Range Voltmeter **(RA-4)**

A new frequency-selective voltmeter with an accessory spectrum display unit is tunable from 10 kHz to 32.1 MHz in a single band. It is equipped with two switchable bandwidths to measure signal components in a 250 Hz or a 3,100 Hz bandwidth and measure voltages as low as 1 mv. The auxiliary spectrum display unit provides visual analysis of the signals present in a frequency band. The instrument uses all solid-state components. *Philco Corp.*

Communication Console **(RA-5)**

Centralized communications control for faster yard operations is now available in a yardmaster's control console. Each console is designed to meet a specific requirement by unitizing voice circuits, such as: talkback, paging, group paging, intercom, selector, magneto, dispatcher, block, radio control and monitoring. Also included are keys, buzzer, speakers, microphone and stand, and terminal blocks wired into the console. *Electronic Communication Equipment, Division of Western Industries, Inc.*

RAILWAY AGE
THE TRANSPORTATION WEEKLY

30 Church Street, N.Y., N.Y. 10007 READERS' SERVICE (Att. George Johnson)

PLEASE SEND ADDITIONAL INFORMATION ABOUT PRODUCTS IN ADVERTISEMENTS NUMBERED: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

PLEASE SEND INFORMATION ABOUT PRODUCTS DESCRIBED ON PAGE 29 MARKED RA-1 RA-2 RA-3 RA-4 RA-5

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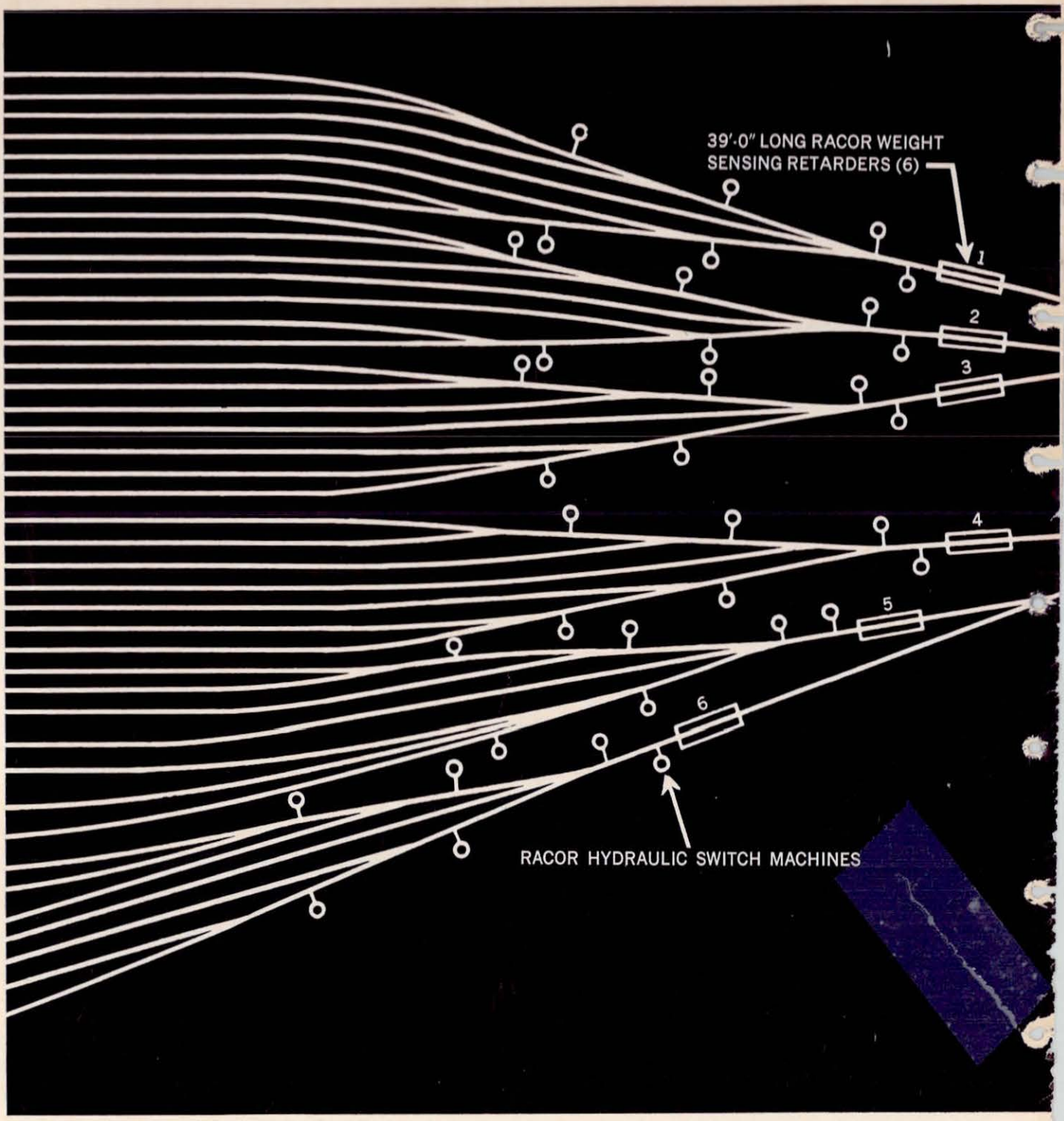
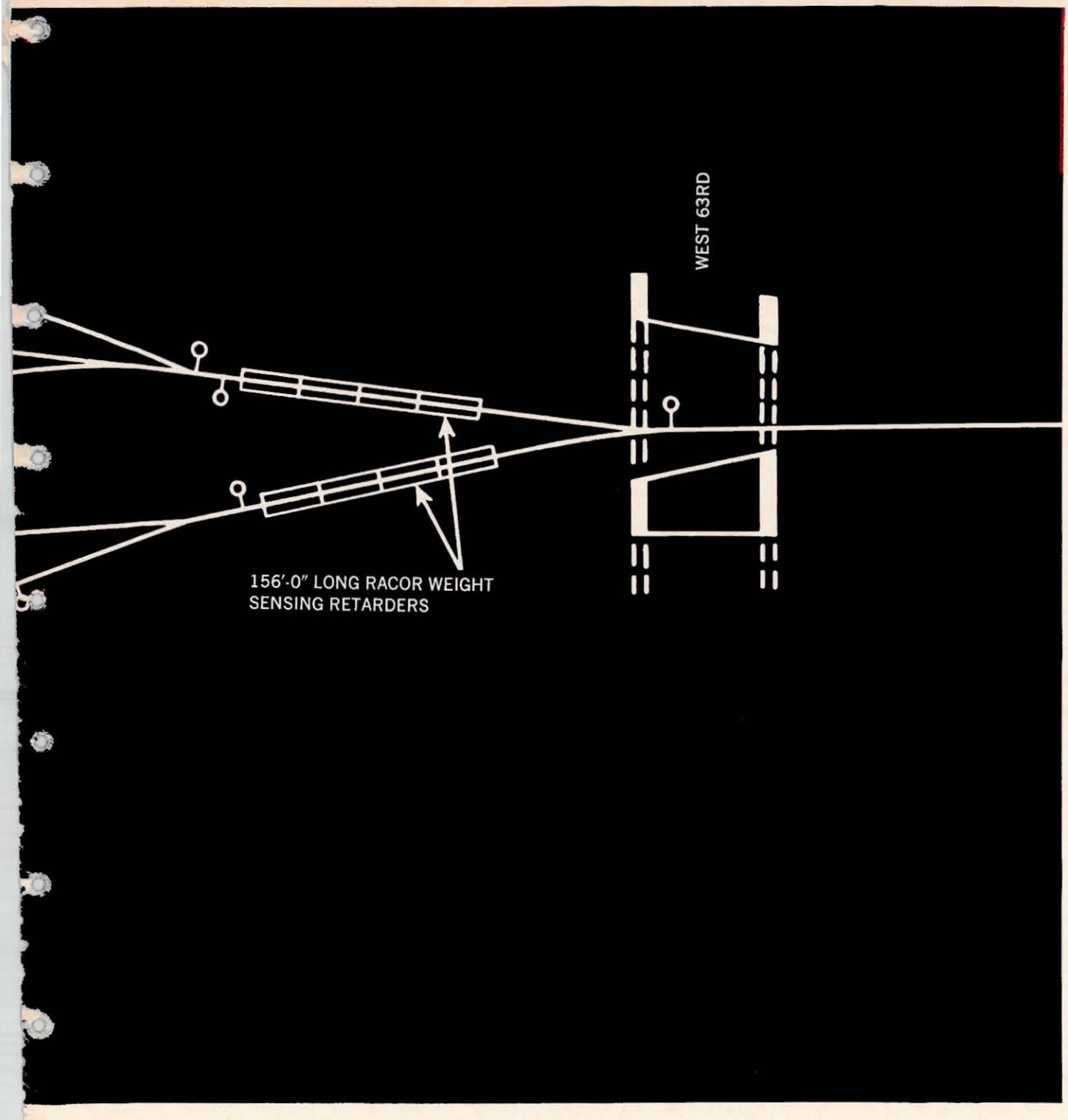


The Pennsylvania figured their Economatic® Yard would be a winner. They were right. It has paid out already. Just 16 months later.



Designed to return its $1.5 million conversion cost in two years, Pennsylvania's 59th Street Yard in Chicago has returned 100% in sixteen months of operation!

This 42-track, low-cost, automatic hump yard is built around weight-responsive Racor® retarders and automatic switch machines. Cars over the hump average 1200 per day. On peaks, the total is 1400.

Over 500,000 cars have been handled with a loss and damage reduction of over 50 per cent; 12 hours saved per car going through the yard; greatly reduced pilferage, and increased safety for the yard crews.

Talk to your Abex representative about an Economatic retarder yard that will pay for itself on schedule.

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Railroad Products Division

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TENDERS

Government of Trinidad & Tobago

Purchase of Rolling Stock Rails and Stores of the former Trinidad Government Railways

TENDERS are invited for the purchase from the PUBLIC TRANSPORT SERVICE CORPORATION of Trinidad and Tobago of the following Rolling Stock, Stores and other material of the former Trinidad Government Railways:—

SCHEDULE A. LOCOMOTIVES

Steam Engines	— 9 serviceable
	8 unserviceable
Diesel Engines	— 9 serviceable
Railcars	2 serviceable
Standard gauge:	4 ft. 8½ ins.

SCHEDULE B. WAGONS, CARRIAGES, ETC.

Wagons	— 438 (approx.)	various	tonnages
Tanks	— 41 (approx.)	"	capacity
Brake Vans	— 9 (approx.)		
Carriages	— 30 (approx.)		

Mainly steel bodies and frames of standard gauge 4 ft. 8½ ins.

SCHEDULE C. RAILS:

Approximately 160 miles (854,800 ft.) of rail on the railway routes.
Approximately 61,277 feet of rail in stock.
Gauge — 60 lbs. and 80 lbs. flat bottom.

SCHEDULE D. STORES: appropriate to railways.

Various and assorted nuts, bolts, wheels, axles and other spare parts, tools etc., all for railways.

2. Tenders may be submitted for any or all of the Schedules and on the prescribed form supplied with the Schedule. Tenders must be for a complete group of items under a Schedule. Tenders for part of a group will not be considered.

3. Except for the rail on the railway routes, all the above items are located in the Compound of the Public Transport Service Corporation in Trinidad, and may be inspected by arrangement with the General Manager of the Corporation, Railway Buildings, South Quay, Port-of-Spain, Trinidad W.I.

The prescribed forms on which to tender together with a copy of the Schedules giving details of specifications and quantities of the materials offered for sale, may also be obtained from the General Manager.

4. Persons wishing to tender are required to pay a tender deposit of TT $100.00 to the Chief Accountant of the Public Transport Service Corporation, and attach the receipt to their tender.

5. The tender deposit of the unsuccessful tenderers who have submitted bona fide tenders will be refunded, but the deposit of any person who fails to submit a tender or who withdraws his tender after tenders have been opened for any reason which is not acceptable to the Central Tenders Board will be forfeited.

6. The tender deposit of the successful tender(s) will be retained until the Public Transport Service Corporation certify that the articles have been removed from their Compound. The successful tenderer must pay the Public Transport Service Corporation by Certified cheque, cash or money order for the articles within fourteen (14) days of notification of acceptance of his tender. Failure to pay for the material within the specified time, may result in the successful bidder's tender deposit being forfeited and the award cancelled.

7. The successful tenderer(s) must remove all rails from the routes and all material from the Corporation's Compound within 90 days of the date of payment for the material. Failure to remove all the items within the stipulated time will result in the forfeiture of the tender deposit of the successful bidder and the items will be sold. Any expenses incurred in so selling, including storage and security of the items will be deducted from the receipts of the sale and the balance, if any, shall be paid to the successful tenderer concerned.

8. Sealed tenders will be received up to 4.00 p.m. Friday, June 16, 1967, and must be addressed to the DIRECTOR OF CONTRACTS, CENTRAL TENDERS BOARD'S OFFICE, 31 ST. VINCENT STREET, PORT OF SPAIN, TRINIDAD, W.I. Envelopes must be marked "TENDERS — PURCHASE OF RAILWAY PROPERTY AND STOCKS", and must be deposited in the Tenders Box at the office of the Central Tenders Board at the above address.

9. The Board reserves the right to reject any tender which is not accompanied by the tender deposit receipt, or is received unsigned or in unsealed envelopes or with alterations or erasures not initialled by the tenderer.

10. The Central Tenders Board does not bind itself to accept any tender. Sgd. K. Kelshall
DIRECTOR OF CONTRACTS
CENTRAL TENDERS BOARD

Freight and Passenger Car Charts

These charts are very helpful to AAR billing clerks, mechanical engineers, purchasing and stores personnel, car inspectors, write-up men, car foremen, and anyone else who needs a knowledge of car parts and their relation to each other.

The charts include a cutaway diagram of the car and a listing of important parts with arrows showing where the part is located. These charts are a part of standard training programs used on a number of major railroads.

$2 each
$10 for any six

If you are not satisfied

YOUR MONEY WILL BE REFUNDED

if you return the charts to us within 30 days

THE RAILWAY EDUCATIONAL BUREAU
1809 CAPITOL AVENUE
OMAHA 2, NEBRASKA

Please send the charts I have checked below. If I am not satisfied I will return the charts within 30 days for a full refund. I enclose a check or money order for $2.00 for each chart or $10.00 for any six charts.

- ☐ **Streamlined light weight passenger car (16x25 inches)**
- ☐ **Covered hopper car (20x30 inches)**
- ☐ **Box car, AAR standard 40 ft. (23x25 inches)**
- ☐ **Air conditioned chair car, 1930 design (18x35 inches)**
- ☐ **Tank Car (22x35 inches)**
- ☐ **Refrigerator Car, wood sheathed, steel underframe, 1920 design (14x20 inches)**

RA 5/15/67

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LETTERS FROM READERS

Encomium

Gloucester, N.J.

To the Editor:

My sincerest congratulations go to the staff or Railway Age for providing the railroad industry an outstanding news medium. I am kept up to date through what I must say is the finest, most modern, informative periodical ever.

William H. Powelson
Owner/operator
Penn-Jersey Coachways

"Masterpiece"

Washington, D.C.

To the Editor:

Your Keystone Corridor article (April 3, p. 18) is a masterpiece. It combines the best Railway Age in-depth treatment plus the most timely possible publication of the facts—outside of running a special issue.

Joseph R. Ewing, Director
Transportation Action Program
Chamber of Commerce of the U.S.

What's in a name?

Kensington, Md.

To the Editor:

It's probably too late to do anything about it, but the new name selected for the SAL-ACL merged system, as reported in Railway Age April 17, is a graceless tautology. It's bad enough that some railroads no longer operate to places specified in their names (e.g. the AT&SF), but the Seaboard Coast Line does not make up for that by telling you twice where it runs. At that, you now can't tell on which coast (or seaboard) it operates. It might have been expected that a ground transportation company that called itself an air line should by now have become sensitive to the importance of accurate names. Wouldn't "Atlantic Seaboard Line" have made more sense?

Stanley Metalitz

DIVIDENDS DECLARED

MONON.—Class B, common, 5% stock distribution, payable June 30 to holders of record June 2; subject to approval of Interstate Commerce Commission.

NORFOLK & WESTERN.—$1.50, quarterly, payable June 9 to holders of record May 11.

PENNSYLVANIA.—60¢, quarterly, payable June 13 to holders of record May 19.

PITTSBURGH & WEST VIRGINIA.—5¢, monthly, payable May 31 and June 30 to holders of record May 15 and June 15, respectively.

SEABOARD AIR LINE.—45¢, quarterly, payable June 14 to holders of record May 31.

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Why should you be interested in a map

Because it could mean a lot to you.

You see, each system on this map represents someone like you, who had a need for more effective and economical point-to-point voice, video, and data communications.

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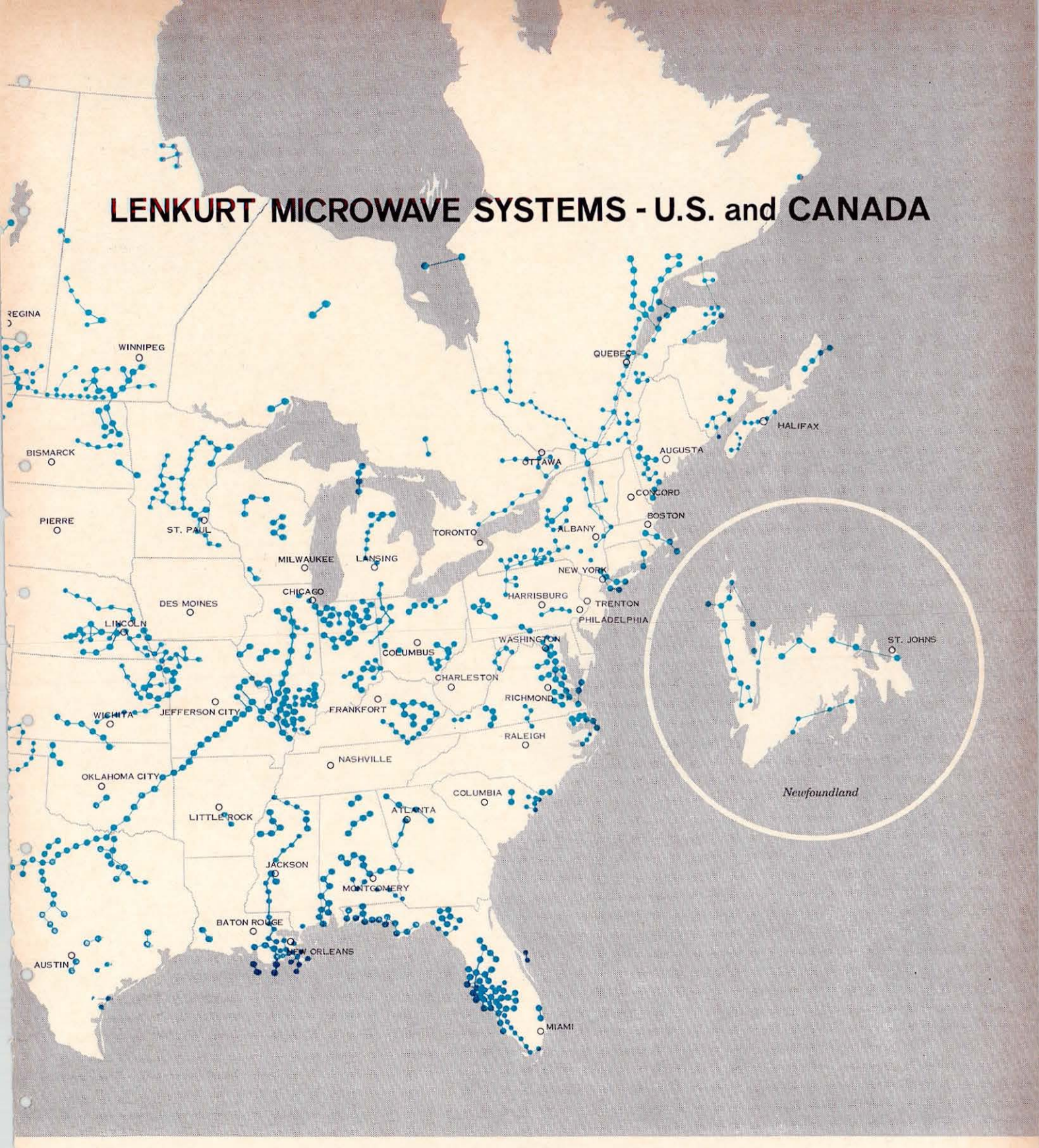
Reasons?

We pioneered microwave radio and are continually working



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on new developments and improvements. Figures show we're the leading supplier of microwave equipment to independent telephone companies, industrial companies, government agencies, and military services. Almost half the microwave purchased by these users is Lenkurt. We offer 20 varieties of microwave radio operating from the 150 MHz band to the 13250 MHz band. Shouldn't you be on our map?

Contact your local Lenkurt representative or call Lenkurt Electric Co., Inc., San Carlos, California. Offices in Atlanta, Chicago, Dallas, and Stamford, Connecticut.

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Long years of experience have given us an understanding of the needs of both railroad management and the railroad employees. Fulfilling these needs has been the basis of our becoming the world's largest independent caboose builders.
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PEOPLE

CANADIAN NATIONAL.—Harry G. Wortman, assistant manager, Lakehead Area, Port Arthur, Ont., appointed freight sales manager, Prairie Region, Winnipeg, Man., succeeding **A. R. Steele,** promoted to general manager of customer relations, freight sales, system, Montreal.

H. R. Beck, railway telecommunications project engineer, appointed assistant chief engineer—administration—system, Montreal. **E. Csak,** assistant engineer, appointed design engineer, Great Lakes Region, Toronto, succeeding **T.R. Sprackett** (RA, April 24, p. 56). **N.A.R. Hanks,** transportation planning engineer, appointed assistant general superintendent transportation (technical), succeeding **E.M. Hallonquist,** promoted.

L. R. Laird, work study analyst, regional transportation, named training instructor, regional employee relations, Great Lakes Region, Toronto, succeeding **M. Cahill** (RA, Feb. 20, p. 31).

CENTRAL OF GEORGIA.—Robert L. Nall, assistant freight traffic manager, Savannah, Ga., appointed district sales manager there. **Marion M. Porter,** division freight agent, Savannah, named sales representative there. **Fritz J. Gattmann** also appointed sales representative, Savannah.

FRISCO—James E. Prickett named district sales manager, San Francisco.

INDIANA HARBOR BELT.—Donald B. Fleming, general manager, western district, **New York Central,** Cleveland, named general manager, **IHB,** with headquarters at Hammond, Ind. He succeeds **Charles B. Fleming,** named assistant to vice president, operating department, **NYC,** New York.

KANSAS CITY SOUTHERN—W. F. Pregge, vice president and comptroller, and **J. J. Weiss,** vice president and secretary, retired April 30. **George E. Kellogg** named comptroller and acting secretary of **KCS, Kansas City Southern Industries, Inc.,** and the **Louisiana & Arkansas. Lawrence C. Pattison** appointed general freight agent, Kansas City, Mo. **Thomas F. Boyce, Jr.** named assistant general freight agent (divisions), Kansas City.

LOUISVILLE & NASHVILLE—Raymond E. Bisha, general manager, elected vice president—operation (RA, May 8, p. 34), to succeed **C. S. Sanderson,** who has retired from the operating position but will continue with the company as vice president-staff to handle special assignments. **Charles A. Nick,** district freight agent, Seattle, named general agent in charge of the Houston sales office, succeeding **Paul W. Lawrence,** retired.

(Continued on page 40)

MARKET OUTLOOK

Carloadings

Loadings of revenue freight in the week ended May 6 totaled 561,724 cars, the Association of American Railroads announced on May 11. This was a decrease of 4,122 cars, or 0.7%, compared with the corresponding week last year; and a decrease of 29,457 cars, or 5.0%, compared with the equivalent 1965 week. Ton-miles generated by carloadings in the week ended May 6 are estimated at 14.3 billion, a decrease of 4.1% below the corresponding week of 1966, and 3.2% above the 1965 week.

REVENUE FREIGHT CARLOADINGS
For the week ended Saturday, May 6

District	1967	1966	1965
Eastern, including Allegheny and Pocahontas ..	228,747	243,998	244,205
Southern	117,628	119,505	117,834
Total Eastern and Southern Districts	346,375	363,503	362,039
Northwestern .	69,264	85,335	79,533
Central Western	108,006	114,007	110,027
Southwestern	38,079	39,399	39,582
Total Western Districts	215,349	238,741	229,142
Total All Roads	561,724	602,244	591,181
Commodities:			
Grain and Grain products	40,572	51,395	44,030
Livestock	1,482	2,011	2,407
Coal	116,695	110,104	108,512
Coke	7,348	8,991	8,631
Forest Products	38,375	40,997	39,137
Ore	42,025	53,924	51,614
Merchandise l.c.l.	4,847	6,456	9,826
Miscellaneous .	310,380	328,366	327,024
May 6	561,724	602,244	591,181
Apr. 29	565,846	574,093	592,982
Apr. 22	558,062	543,639	570,489
Apr. 15	553,558	543,049	547,742
Apr. 8	543,761	568,683	557,067
Cumulative total, 18 weeks ...	9,545,919	9,821,097	9,722,138
Estimated revenue ton-miles (billions) 18 weeks ...	246.8	249.0	230.2

PIGGYBACK CARLOADINGS.—U. S. piggyback loadings for the week ended Apr. 29 totaled 20,776 cars, carrying 34,066 trailers, compared with 22,603 cars, carrying 37,500 trailers, in the corresponding 1966 week. Loadings for 1967 up to Apr. 29 totaled 379,546 cars, carrying 623,003 trailers compared with 358,286 cars, carrying 592,545 trailers, in the corresponding period of 1966.

IN CANADA—Carloadings for the seven-day period ended April 21 totaled 71,949 cars, compared with 72,948 for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada		
April 21, 1967	71,949	25,970
April 21, 1966	81,072	26,967
Cumulative Totals		
April 21, 1967	1,111,358	396,418
April 21, 1966	1,174,263	410,604

FREIGHT TRAIN CARS

► *Erie Lackawanna.*—Ordered 50 Center Flow dry bulk materials cars of 100-ton capacity from ACF Industries. The 2,970-cubic-foot body of each car will be fitted with four 30-inch circular roof hatches and two controlled-gravity unloading outlets. EL plans to use the cars for transportation of sand and cement. Delivery of the $700,000 order is scheduled to begin in June from ACF's Huntington, W. Va., plant.

► *Katy.*—Directors authorized the acquisition of 400 new gondola cars at a cost of approximately $5 million. The cars are being acquired through a leasing arrangement. Greenville Steel Car will supply 200 and Bethlehem 200. The board also authorized Katy's management to proceed with plans for the financing of an additional 1,500 cars. President John W. Barriger said he hoped the financing arrangements would be completed by the end of this year, so that the cars could be added to the Katy's fleet in 1968.

► *Norfolk Southern.*—Is acquiring 125 70-ton open-top hopper cars, for sand and gravel haulage, under a lease arrangement. The cars will be delivered during May. The railroad is also about to take delivery of 60 new 70-ton all purpose box cars. In addition to the new units, Norfolk Southern is rebuilding 45 hoppers in its own shops.

► *U.S. Army.*—Pacific Car & Foundry, Renton, Wash., is building 28 new narrow-gauge refrigerator cars for use by U.S. military forces in Vietnam. The cars will have self-contained Carrier refrigeration systems capable of automatically maintaining any selected temperature from 10 below zero to 75 above. A diesel-driven electric generator is included as part of each system.

► *Union Tank.*—Is building 2,168 tank cars for its own fleet. Deliveries will begin in June.

► *April bad order ratio remains same as last year.*—Class I roads on April 1 owned 1,497,526 freight cars, 17,449 more than on April 1, 1966, according to AAR report summarized below. Bad order ratio remained the same as on April 1, 1966.

	April 1, 1967	April 1, 1966	Change
Car ownership	1,497,526	1,480,077	+17,449
Waiting repair	74,529	73,607	+ 922
Repair ratio	5.0%	5.0%	0

LOCOMOTIVES

► *Canadian National.*—Ordered 68 new 3,000-hp freight locomotives from General Motors Diesel, London, Ont. Value of the order has not been disclosed. However, it is believed to be G-M Diesel's largest order for diesels in the last seven years, and in terms of horsepower it may be the biggest ever, according to Canadian sources. CN now has 2,084 diesel-electrics in its fleet.

► *Norfolk Southern.*—Will add three new diesel locomotives to its fleet this summer. Details have not been specified.

FOREIGN

► *Guyana.*—Ordered two 80-ton, main-line diesel-hydraulic locomotives from Fairbanks Morse (Canada) Ltd., Kingston, Ont.

YOU OUGHT TO KNOW

Tank-car orders at high level: Union Tank Car Co. had a first quarter gain of 11% in earnings—and "all of the profit improvement is attributable to our tank car leasing operations in the U.S. and Canada," President J. W. Van Gorham has told stockholders. He said tank-car orders have continued strong despite suspension of the investment tax credit: "The petroleum, chemical, fertilizer and compressed gas markets, which we serve, have continued their steady growth and their demands for tank cars have reflected this fact."

New assignment for Dorrance: John B. Dorrance, Jr., has been named director of the Northeast Corridor high-speed demonstration project for the Pennsylvania. PRR President Allen J. Greenough said technical aspects of the project will continue to be handled by James W. Diffenderfer, assistant vice president for special services. Dorrance will work with federal officials in making the new service operational this fall. His duties as general manager, passenger sales, have been assumed temporarily by W. G. S. Savage, Jr., general manager of passenger rates.

Urban transport panel named: Gene R. Schaefer, director of the WABCO Mass Transit Center at Pittsburgh, has been named vice chairman of the newly-formed Special Advisory Panel on Urban Transportation of the U.S. Chamber of Commerce. Other members of the panel well known in railroad circles include W. Gordon Robertson, chairman of the board, Bangor & Aroostook; Robert M. Coultas, manager, transportation systems business development, General Electric, Washington; and Anthony F. Arpaia, consultant, REA Express.

Change at the RLEA: There's a new vice chairman at the Railway Labor Executives' Association—but RLEA continues with representatives of non-operating organizations in the top jobs. RLEA Chairman George E. Leighty has been re-elected; John W. O'Brien has been named vice chairman, succeeding Railway Employes' Department President Michael Fox, who was not a candidate for re-election. Leighty is president of the Transportation-Communication Employees Union; O'Brien is vice president of the Sheet Metal Workers' International Association. Secretary-treasurer of RLEA, re-elected, is Donald S. Beattie.

Changing signal systems: The ICC has set aside its recent order revising its instructions for applications to change railroad safety equipment, under Section 25 of the Interstate Commerce Act (RA, Feb. 20, p. 36). Some revisions were opposed by the Association of American Railroads and the ICC determined that further consideration will be the responsibility of the new Department of Transportation. The order was set aside and the matter transferred to D.O.T. for disposition. Applications for discontinuance, modification or installation of block signal systems, interlocking, traffic control systems, and automatic train stop, train control or cab signal systems were affected under the order.

Rate increase favored: Maine Central President E. Spencer Miller told stockholders at Portland that he favors a "review" of railroad rate policy. He said the industry's average rate for hauling one ton of freight one mile is now 1.25 cents, compared with 6.8 cents for truckers and 20.4 cents for freight airlines. Highway freight charges, Miller pointed out, have risen by almost 10% since 1958 while rail rates have dropped by 14%. "Although the nation undoubtedly owes the railroad industry a debt of gratitude not only for holding the line, but also for actually cutting its charges over the past nine years, it is becoming increasingly apparent that we must review this long-standing policy," Miller said.

Truck tonnage: Intercity truck tonnage in the week ended April 29 was 3.9% below that of the previous week, and 8.3% below the volume in the corresponding week of 1966, according to American Trucking Associations.

Current statistics

Net Income	
12 mos., 1966	$902,000,000
12 mos., 1965	815,000,000
Carloadings, revenue freight	
18 wks., 1967	9,545,919
18 wks., 1966	9,821,097
Freight cars on order	
Apr. 1, 1967	42,010
Apr. 1, 1966	54,414
Freight cars delivered	
3 mos., 1967	24,474
3 mos., 1966	22,098
Serviceable cars	
Apr. 1, 1967	1,422,997
Apr. 1, 1966	1,406,470

Cartoon by Charles Schulz

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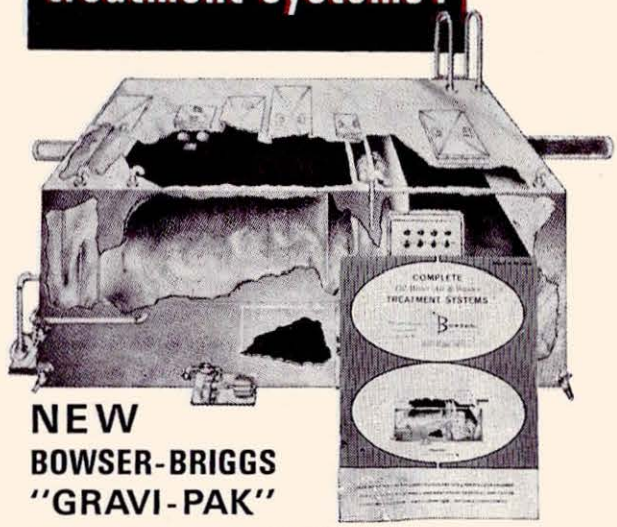

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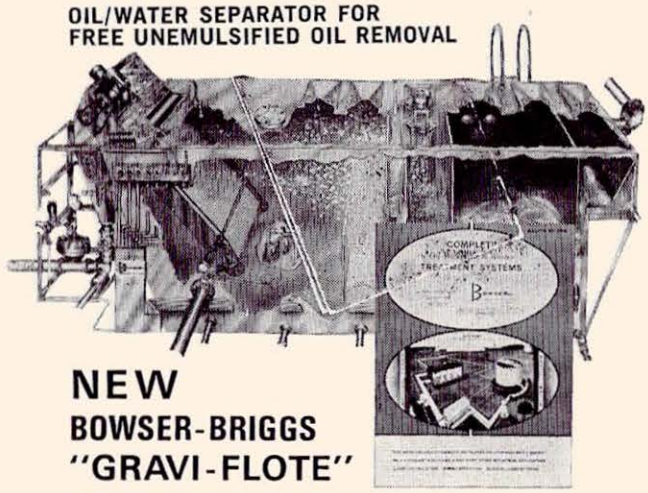

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PRR

(Continued from page 36)

MISSOURI-KANSAS-TEXAS—**Edward A. Merkle** elected to the newly created position of chairman of the board. He is president of **Madison Fund, Incorporated** and has been a director of the railroad. **Raymond B. George,** general manager, promoted to vice president-operation, with headquarters at Dallas and Denison, Tex. **Don R. Montgomery,** controller, elected assistant vice president-operation and controller, Denison. **Billy R. Bishop,** general superintendent transportation-mechanical, replaces Mr. George at Denison.

MONON.—**J. J. Stein,** vice president—operations, appointed senior vice president with general supervisory responsibilities. **W. J. Nuetzel,** chief engineer, elected vice president-operations. **John B. Goodrich,** vice president-law and secretary, will have additional administrative responsibilities and authority over certain of the road's subsidiary companies. **R. E. Novy,** comptroller, elected vice president and comptroller. **C. A. Pfister,** assistant vice president, elected vice president-traffic. **J. B. Conn** elected to the new position of vice president, industrial development. Mr. Conn will continue as president of the subsidiary **Monon Realty Co. Nelson Hearn,** treasurer, will also administer the company's insurance program.

NEW YORK CENTRAL—**Robert W. Minor,** vice president—law, New York, appointed to the new position of vice president—executive department. **James B. Gray,** general counsel, named vice president and general counsel. **F.L. Kattau,** assistant to president—administration, appointed assistant vice president—executive department. **Charles B. Fleming,** general manager, **Indiana Harbor Belt,** appointed assistant to vice president, NYC, operating department, New York. **Richard B. Hasselman,** general manager, Southern District, Indianapolis, named general manager, Western District, with headquarters at Cleveland and supervision over the Chicago area. He succeeds **Donald B. Fleming,** named general manager, **Indiana Harbor Belt,** Gibson, Ind. **J. Taylor** succeeds Mr. Hasselman.

NORTHERN PACIFIC—Has created a system-wide market development organization with headquarters at St. Paul. **C. Duane Carley** named director of the new organization. Present plans call for appointment of four or more managers under the director of market development. They will be specialists on transportation of specific commodities or commodity groupings, such as lumber and wood products, agricultural products, and TOFC traffic.

PENNSYLVANIA—**John B. Dorrance, Jr.,** named director, Northeast Corridor demonstration project, reporting to **Allen J. Greenough,** president. Mr. Dorrance's former duties as general manager, passenger sales, have been assumed temporarily by **W.G.S. Savage, Jr.,** manager of passenger rates. **James W. Diffenderfer** will continue to coordinate technical aspects of the project.

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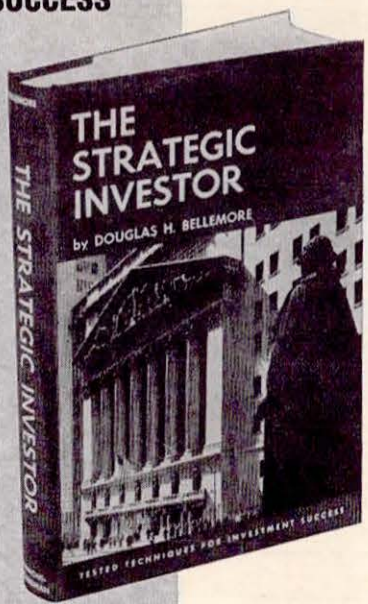

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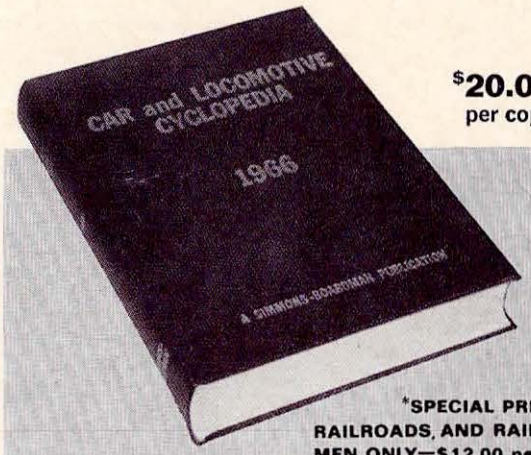

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VIEWPOINT

Yes, Senator—it's important

It took the House of Representatives six days to act on the President's urgent request for restoration of the 7% investment tax credit. It took the Senate 54 more days—spent mostly in wrangling over riders—to approve its own version of the bill. That approval came last Tuesday.

By the time these words see print, we earnestly hope that they will have lost their point—that a final bill will have emerged from conference committee and gone to the White House.

The damage originally done by suspension of the tax credit was compounded by the two months of uncertainty that followed the President's March 9th plea for its reinstatement. Further delay is unthinkable.

Senator Russell Long, chairman of the Senate Finance Committee, was recently quoted as questioning the "importance" of restoring the tax credit.

Speaking for the railroads, we can say that it is as important as anything that has come before Congress in many years. In the first three months of this year (as RPI President Nils Lennartson, among others, has reminded the Senator) locomotive orders were 86% off the healthy pace set in 1966; orders for new freight cars declined 65% (at a time when car shortages and rumors of car shortages have been the talk of Washington except, it seems, in the Senate).

There are those who claim that suspension of the investment tax credit cannot be blamed for this; they wonder if a cooling of the national economy isn't really responsible.

We suggest that there might have been no cooling of the economy if the capital goods market had not been so severely hit by the removal of the investment incentive in the first place.

We further suggest that those who doubt the important of the tax credit's restoration listen to what F. E. Barnett, chairman of the executive committee of the Union Pacific Railroad, had to say on the subject recently.

Mr. Barnett reminded New York Security Analysts that the UP spent $209 million on capital improvements in 1966. So far, for 1967, the railroad has budgeted only $109 million for capital expenditures. But, said Mr. Barnett, the UP may spend an additional $64.5 million, principally for freight cars, if and when Congress restores the tax credit.

We can't say, in precise dollar terms, what other railroads may have in mind. But the UP accounted for 10% of all railroad capital spending in 1966; so it is conceivable that ten times $64.5 million in capital orders may be awaiting Congressional action on the President's two-months-old request.

Is $645 million important? We think so.

Managers need the right to manage

We share the distress of those who are saddened by the shrinkage of passenger-train service—and we applaud such enterprises as the Northeast Corridor project, the forthcoming Turbotrain tests in this country and Canada, and the auto-train experiment soon due for trials on the Atlantic Coast Line. All are designed to identify, and to serve, passenger markets that can still meet the tests of public necessity and acceptability.

We cannot agree, however, that further restrictions on the right of railroad managers to manage comprise any real solution to the passenger problem. Yet this is what is proposed in legislation now before Congress. This legislation would make it more difficult for railroads to discontinue uneconomic passenger trains (see page 11).

Doubtless, many well-intentioned "railfans" will support these efforts to impose new restrictions and delays in train-off proceedings. We ask only that they first put to themselves this question: "How would my own business fare if I were deprived of the right to manage it?"

Real railfans should be interested in preserving a strong railroad industry—not just a segment of it.

Pennsylvania Chairman Stuart T. Saunders has been as friendly as anybody we know to the passenger train; at considerable expense, his railroad is cooperating with the federal government in the Northeast Corridor high-speed train tests. As Mr. Saunders remarked last week: "It has become increasingly clear that a sharp break with the past is absolutely necessary."

A return to past practices certainly isn't the answer.

on guard

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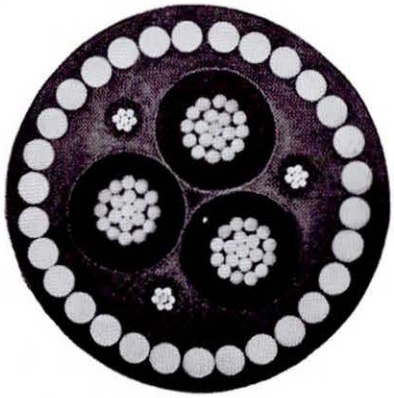

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Now we're working on the Pennsy

The Pennsylvania Railroad decided to put the KarTrak* ACI System to work for them right now. How come? Simply because they saw our system in operation under *actual* working conditions—on four other U.S. railroads.

The PRR will label close to 40,000 hopper cars and more than a thousand locomotives with KarTrak ACI markings. And then install two weigh-in-motion scales for coal in trainload lots, traveling from mines in West Virginia and Pennsylvania. As the cars pass the weigh points, the KarTrak ACI System will transmit car weights, initials, numbers and locomotive numbers to the Pennsylvania's on-line computer system in Philadelphia.

By using KarTrak ACI, the Pennsylvania will be making even faster deliveries, giving better customer service and improving its internal operation. The railroad will speed up its weighing process by converting to coupled weigh-in-motion readings with KarTrak ACI.

Sylvania, a long-time leader in the electronics industry, is now applying its experience to rail transportation. Every railroad can benefit. The Pennsy has. How about you?

For more information, call collect: 617-275-0300; or write: KarTrak System, Sylvania Electric Products Inc., P.O. Box 268, Bedford, Massachusetts 01730.

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